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THE DECALOGUE OF THE JUNIOR HIGH SCHOOL

D. E. PHILLIPS
University of Denver

The standard junior high school is yet to be born. It is nowhere in existence. All over this country there have been spasmodic efforts launched. They aim to break the chains of the past traditions. The successes have varied from zero to a few radical changes. But when these reforms are carefully examined, the departures from the former standard seventh and eighth grades are found to exist more in theory and on paper than in practice.

Let us believe and hope that when the standard junior high school arrives it will be a marked departure from the old system. Yes, a definite departure in many ways. The imminent danger consists in making ourselves believe that we have instituted reforms when we have not. Such would be a calamity to this national movement. Many junior high schools today consist only in the fact that the seventh and eighth grades have been moved to some building and given a name. Others have undertaken various modifications. In many cases they have been filled with teachers so set in their ways that it is impossible for them to carry out any new thing.

Long has this nation waited for some desirable reforms—reforms in government, reforms in religion, reforms in colleges, reforms in our petrified courses of study—but especially reforms in our conception of the intellectual life and conduct of adolescent boys and girls. This war has loosened the chains of tradition. It has demonstrated the possibility of almost any reform movement. It has suggested the necessity of a great reconstruction in education. No country on earth ever had such an opportunity for educational improvement as now exists in America. The nation that does not have an educational revival after a great war is hopeless. It was the genius and enthusiasm of Fichte that turned the German people to education after the Napoleonic wars. Had they been faithful to his ideas of an education for peace and internal improvement, this world war would never have occurred.

The junior high school which we are about to describe some will pronounce educational chaos. Others may admit its idealistic nature, but declare it impossible of realization. The past two years prove that scarcely anything is impossible if the American people can be brought to feel its necessity. The word "impossible" should have a very small place in the vocabulary of achievement. In the office of one of the leading firms of this country I once saw this sign: "The darned fool did not know it was impossible; so he went ahead and did it."

In presenting what we hope the future will bring forth we do not in any wise mean to condemn the worthy efforts now being made by the superintendents of this country. We realize that it is wise to evolve just as fast as the people will stand for it. But to have no ideal end toward which we are evolving is blind chaos, not conscious evolution. When we are once sure that some definite, comprehensive goal or future destiny guides the efforts of our school authorities, we can fairly well trust the outcome. Blind, spasmodic effort, the

innumerable wild panaceas, the efforts to camouflage the old, to make a show, to deceive others and ourselves—these are the enemies of reconstruction in education.

Here are a few demands to which the future junior high school can, should, and we hope will conform.

1. *Under wise guidance there shall be almost unlimited freedom in the choice of subjects.*—It is now sixty years since Spencer entered a plea for individual freedom in the choice of subject-matter in education. He gave then the arguments that have been elaborated since. A few years later President Eliot of Harvard advocated the same principles and set the practical example for this country.

Some twelve years ago the writer was appointed by the Educational Council of the Colorado Teachers' Association to investigate the elective system in American education. We found that the system had a footing in nearly all colleges and in nearly all high schools in the middle and western states. By some we were told then that the reaction was setting in, and from time to time we have heard this same cry. Yet each year conditions and the good fruits of individual freedom compelled more freedom. There can be no reaction to a movement founded on such biological, economic, and psychological principles. The past two years produced more changes in favor of individual freedom than any previous ten years.

One of the chief motives behind the junior-high-school movement has been greater adaptability to the individual needs and individual differences in the child of twelve to fourteen. It was urged as a necessary means for keeping boys and girls of the seventh and eighth grades in school.

It is true that a program of minor electives is in most cases provided for on paper. But what happens? More than one hundred and fifty junior-high-school teachers and those preparing to teach or supervise such work were asked to make a

definite list of the time that should be required in the standard subjects now taught in the seventh and eighth grades and the first year of the high school. This would cover both the two and the three-year plans. When this material had been digested, to my amazement I found that there would only be an average possibility of five hours per week elective work. However, there existed almost unanimous opinion as to the advisability of this freedom of choice, until it became necessary to translate theory into actual practice. Then the old traditional schedule was almost completely asserted.

Is there any one subject that should be made uniformly obligatory as a condition of remaining in school or as a condition of final completion of the course? I do not believe there is—not even arithmetic. Our commandment No. 1 carries with it a clause—"under wise guidance." By means of wise guidance you can usually get children to do what is actually best for them without open compulsion. But it should not mean that anyone shall make up his mind indirectly to foist on all children any one study without due regard to special talents or individual variations. We are not theorizing. The system has been tried. If only space permitted, we could give scores of cases of successful operation. If we do not grant this freedom, the junior high school will fail to solve the problems it was launched to solve.

2. *Any student shall be freely promoted in any single subject or to any grade at any time he is able to accomplish the work of that study or grade without regard to how much time he has spent on previous courses.*—Is not this an educational principle that should be adhered to from the elementary schools through the college? Yet our alarming conservatism compels us to establish a special type of school for its realization. A few years ago the meeting of the Department of Superintendence of the

National Education Association applauded such principles of education. However, the big majority went back to run the same old mill—grades, technical examination, 70 per cent passing work, promotion once or twice a year. This is no condemnation of the school authorities of this country. We all do similar things. It illustrates how difficult it is to bring our practice up to our convictions.

Nevertheless, the junior high school is supposed to keep a greater number of children in school, to recognize physiological and intellectual age rather than chronological age, to provide for special talents and exceptional development, to awaken and to stimulate achievement rather than to enlarge *fact-knowledge*. How can these things be accomplished without freedom of promotion and encouragement to go ahead?

3. *The junior high school must finally include much material not now in the grades or in the first year of the high school.*—Our present method of sending the child out into the world to earn his living, to achieve his destiny without adequate knowledge of the industrial life of the nation, is an educational blunder almost amounting to a crime. It is productive of crime. Such a course must be made a prominent part of the seventh and eighth-grade work. The child has a right to know all the various lines of his possible future realization. The qualifications, compensation, opportunity for promotion, physical and moral dangers, intellectual and social development, history of the occupation—all these are necessary facts which should be presented concerning every occupation for boys and girls.

Again, the manual and practical industrial work of these grades must be greatly increased. History must be largely biographical, inspirational, and optimistic—not technical *fact-knowledge*. Shorthand, typewriting, and simple bookkeeping should be possible for all who have any talent or inclination

along these lines. Practical science and modern languages must be introduced.

These and other modifications will be worked out as time goes on. Are you ready for these things? Do you believe in them? If you answer in the affirmative, remember that this means a radical modification of our present program. There is no use in offering these things and giving the child no opportunity to take them. You will probably find that some of your useless and unused knowledge of arithmetic and algebra, your long-cherished and detrimental technical grammar, and your over-thoroughness in *fact-knowledge* of history and geography must be eliminated or take a secondary place. Do not worry. We can spare all this and still live in comfort.

4. *Sound scientific vocational guidance shall be a part of every junior high school.*—About three million children under the age of fourteen annually make a raid on the industrial world for some means to make a living. They have never even asked whether they are personally better fitted for one thing than another, whether the choice is temporary or for life, whether they would be happier and better contented in one place than in another. They constitute an army of drifters, Micawbers, and many become unintentional offenders against society. Only a small percentage of them have been advised by teachers or parents as to their life-work. Few of these children have even the aid of sympathetic interest in their destiny. We sin against these children.

What do we mean by "scientific guidance?" First let us distinguish it from fortune-telling and phrenology. On the other hand, if we are warned that such studies as Hollingworth's *Vocational Psychology* indicate the impossibility of scientific guidance, we reply that thinking of the problem by teacher and student is far more scientific and better than blind procedure without thought. But the task is not so hopeless.

It will be accomplished with different degrees of thoroughness. Here is not the place to point out ways and means.

Suppose most children have about the same possibilities. We doubt it. Still they need knowledge about the world's industries, and so far as practicable some testing of their powers by actual experience. But above all do they need psychological sympathy and the psychological value of faith in themselves and faith that they have selected wisely. I have found no work on vocational guidance that adequately emphasizes this phase of the problem. Only this attitude of mind can produce contentment and permanency of occupation and develop the best in an individual.

Every junior high school should have an expert on vocational guidance. He should have deep knowledge of human nature and of our industrial life and be profoundly in sympathy with the struggles of the adolescent. To him should be referred all important cases of individual choice of studies. He should settle them, not as a dictator, but as a kind, sympathetic father.

5. *The future junior high school shall provide ample opportunity for industrial work and for practical commercial activities.*—This calls for considerable funds and for an adjustment to public enterprises. Both are possible and both will be of substantial gain to society. It is all right to spend fabulous sums and sacrifice human life to fight foreign enemies, but she would also realize that ignorance and incompetency are real enemies of society and that vast sums of money and energy are required to combat them. In no nation was the necessity ever so imperative as now during our period of readjustment. Woe unto our leaders if they cannot hear the rumblings of an industrial earthquake.

Junior high schools should be provided with industrial shops of various kinds, with gardens and farms where real

work can be accomplished by those who cannot be induced to achieve in intellectual lines. Training in various occupations for girls should be possible. Arrangements should be made with business firms by which girls and boys who have talent or so choose can spend a part of their time in the practical achievements of the business world. This must be included in any complete system of vocational guidance. These things will cost time, patience, and money. But remember that the helpless, the vagabond, the criminal, cost not only money but suffering of all kinds and human life. There is no rational excuse for neglect in education. The nation that forgets war and directs wisely the industrial and moral education of her people during the next fifty years will avoid internal rebellion and revolutions and will shine as the leader of nations.

6. *Departmental teaching is necessary to the highest efficiency in junior-high-school work.*—Extensive knowledge and special ability are both necessary to hold and inspire the child who is about to be born into the kingdom of industry, of science, of music, of literature, of art, and of moral conduct. We not only believe that departmental teaching furnishes an opportunity for better qualified teachers, but we also feel sure that the future will demand teachers of college training, of maturity, of specialized knowledge, of deeper professional wisdom concerning human nature and especially concerning adolesence. All the commandments of the junior high school will be continually broken so long as teachers and authorities parade their perverted ideas of human conduct as the true pedagogical and psychological knowledge. They must come to know, feel, realize—not by word of mouth, but in the depth of the soul—that all conduct is just what heredity and environment declare it shall be. In the old sense of social accusation there exists no "bad" boy, no criminal—we have only the sick, the unfortunate, the diseased. True knowledge of life compels

us to look upon all mental disorders in the same spirit in which the physician considers physical disease.

7. *Properly supervised study is desirable everywhere, but imperative in the junior high school.*—No phase of human education demands a higher pedagogical art than this. It is the supreme Socratic hour in the life of our teachers. I would rather make up my judgment of true teaching power during this hour than any other. Most teachers who fill this high function can readily be divided into two classes—those who degenerate into the antagonistic suspicious boss and those who go to the other extreme and do the work for the children. Under the first class no true mental efficiency is possible and positive immoral conduct is stimulated. Under the guidance of the second class the pupil is made weaker all the time, memory is substituted for thinking, originality is crucified, and the teacher soon has nervous prostration.

Here is needed that rare gift of the gods which enables one to teach without appearing to do so, to put self entirely in the background, to take pride in watching other minds develop, to leave the pupil feeling that he has accomplished it all, to inspire to self-confidence and achievement. It is that power by which Socrates transformed all Athens. Yet when he was condemned to death for corrupting the youth of Athens he was able to defy any man in Athens to say that he ever taught him anything. Each man knew that Socrates had asked him a few questions, but his convictions he claimed as his own growth and achievement. A new ability, spirit, and purpose must dominate our teachers of the junior high school if they are to supervise the study of minds in the most critical period of human existence.

8. *When the future junior high school is adequately established, the regular high school must be adjusted to this new shrine of the golden age, and not vice versa.*—We are well aware of the

radical nature of this statement. But who fears radical things if they are only right and just? For twenty years, even though a college teacher, I have fought the domination of colleges over the high school. The case stands essentially the same so far as the relation of these two grades of high schools is concerned.

The colleges once decided from a personal and academic viewpoint what students should know on coming to college. Then they told the high schools *what to teach and how.* The high schools almost forgot the 95 per cent who never enter college in the interest of the 5 per cent. Should our regular high schools be allowed to maintain some rigid requirements for admission, we should have a similar and disastrous domination. Practically every principle for which the junior high school should stand will more or less be carried out only inadequately and with no end of camouflage. There shall be no entering the high school. The junior-high-school student is already in the high school in the same sense that the Freshman is in college. All he need do is to go on and prove his ability by doing the work or such work as is best suited to his ends and needs. The dominant trend of all education must be to serve best the greatest number. The minority must adjust themselves to the needs of the majority or devise their own education without interference with the welfare of the majority.

9. *We must create and train a special class of teachers for the junior high school.*—They must differ from other teachers in special knowledge of children from twelve to eighteen or twenty. The demand is even greater than that upon the primary teacher concerning early child life. No teacher can efficiently supervise study until she knows how children of that age study and how they should study.

Again, each teacher should have a sound knowledge of vocational guidance and be filled with enthusiasm and ambition for the achievements of youth. No teacher should be allowed in the junior high school who is not dominated by an active sympathy for the adolescent child, who in most cases, like Dante, finds himself or herself within a forest dark. In the language of Rousseau: "Be humane, be humane. It is your highest duty to be humane: To everything not alien to mankind."

10. *The dominant aim of the junior high school must be to encourage, to inspire to some purpose in life.*—The imparting of knowledge and the completion of a course shall be secondary ends. One of the chief aims of knowledge shall be to create interest in the great problems of life. We must present knowledge that interest may remain and not order interest that knowledge may remain. There can be no higher aim of education for this period than that of creating the proper attitude toward the great problems of life and human conduct. The amount of technical knowledge which the child retains is no proper indication of this attitude. The teacher must be allowed adequate freedom to accomplish these ends. The *measuring mania* is the most conceivably dangerous spirit that can pervade the junior high school.

Who can judge the degree of friendship, of loyalty, of co-operation, of sympathetic helpfulness, of originality, of determination, of purpose to serve, of moral spirit, of religious sentiment, of patriotism, of aesthetic appreciation, of attitude toward home and friends, of tendencies to crime, of obedience to law and order, of appreciation of art, music, and literature—by any display, combination, or arrangement of facts put on paper. These are the eternal verities of life and always imply something far above knowledge about them.

UNIVERSITY PREPARATION OF TEACHERS FOR HIGH SCHOOLS

RAYMOND A. KENT
Superintendent of Schools, Lawrence, Kansas

The data presented here were obtained from written statements prepared by 100 University of Kansas students in the last semester of their Senior year. Each student was a candidate for the University teacher's diploma, which grants the privilege of teaching in any accredited high school in the state.

For two years continuous work had been going on in organizing and administering "special-method courses." Each such course was for the purpose of giving specific preparation to teach a particular subject in high school. The object of this study is to get some definite information as to what such courses actually did to prepare prospective high-school teachers for their specific professional work.

The method of procedure was, first, to give these 100 students a list of typewritten questions. They were asked by the persons in charge of their practice teaching to take the list with them and return written answers. They were told that the answers submitted would have nothing to do with the grade they were to receive. They were to take such time as they wished. Among the questions in this list were the following:[1]

1. How many hours per week did you meet in each course?
2. What was the length, in weeks, of each course?

[1]The writer is indebted to W. D. Reeve and Charles J. Pieper for the list of questions and for beginning the investigation.

3. What fractional part of the course was spent in discussion of subject-matter?

4. What fractional part of the course was spent in discussion of historical material?

5. What fractional part of the course was spent in discussion of methods?

6. What impression did the instructor leave with you concerning the purpose and value of his subject in secondary schools?

7. How do *you* justify the retention of the subject you are teaching, in secondary work?

8. How many lesson plans were you required to prepare in each course?

9. What written form or organization did you use for these lesson plans?

10. How many periods did you spend in visitation of high-school classes? How many of these were required?

11. Were you required to report in any of these visits (oral or written)?

12. Did the class in methods discuss questions of actual classroom procedure observed during the visits?

13. Did your class consider the question of suitable textbooks? If so, what was your method of selecting these texts and which texts did you choose as most suitable?

14. Did you discuss how the special conditions of any community should determine the content of your subject in high-school courses?

15. Did you formulate a course of minimum essentials in your subject?

16. Was there any discussion of special methods for the slow and rapid workers?

Table I contains the tabulation of 47 answers to the foregoing questions. These answers were selected at random except that they were chosen so that each special-method course which had been given to any of these 100 students would be represented, and when possible represented by answers from at least two or more students.

TABLE I

DATA CONCERNING SPECIAL METHOD COURSES

SUBJECT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
English	8	6	¾	0	¼	Not raised	.....	0	.....	0	.....		*n*	*y*	.....	
"	3	18	.....	0	.....	Primary	None necessary	8	Suggested	9	7*r*	*y*	*y*	*n*	*n*	*y*
"	3	18	.....		Almost all	No defense	.....									
"	3	18	1/10	0	9/10	One of importance	Fundamental	0	.....	4*r*	4*r*	*y*	*y*	*y*	*y*	*y*
Mathematics	2	18	⅓	0	⅔	.....	For higher mathematics	1	.....	15*r* 20	*n*	*y*	*y*	*n*	*y*	*y*
"	2	18	⅓	0	⅔	Definite	Practical	1	Subj.-matter & method	24	Pres. *or* ab	*y*	*y*	*y*	*y*	*y*
"	10	6	½†	0	½—	Utility culture tool	Necessary tool	1	.....	0	0	0	*n*	*y*	*n*	...
"	2	18	Little	Little	Almost all	.....	Questionable	1	Aim subject method	18*r*	0	*y*	*n*	*n*	*y*	*n*
"	2	18	.....		All	Necessary	Practical training	1	McMurry	18*r*	*y-or*	*y*	.....	*n*	*y*	*y*
"	1½	18	¼	½	¼	Necessary	Utility and social value	0	.....	*or* 1	0	0	*y*	*n*	*n*	...
"	1	18	⅙	⅜	⅙	Training— Method	Mental discipline	0	.....	0	.....		*y*	*n*	*n*	*y*
"	8	6	¾	¼	0	Thought-training—	Clear mind	1	any	0	.....			*y*	*y*	*n*

"	1	18	1/6	3/8	1/6	practical Mental drill	Mental drill	0	0	*or*	*n*	*n*	*y*	*n*	*y*	*n*
"	2	18	1/4	0	3/4	Thought-training	Necessary thought-training	1	any	1*r* 2	*or*	*y*	*y*	*y*	*y*	*y*
"	1	18	0	3/4	1/4	Practical	.....	0	.....	0	.....		*y*	*y*	...	*y*
"	1½	18	All	0	0	Negative	Important	0	0	0	*n*	*n*	Super	...	*n*	*n*
Biology	3	36	1/8	1/8	3/8	Interesting	.....	0	.....	0	0	0	*y*	*y*	*n*	...
"	3	36	.....			Mental operations	.....	0	.....	0	.....		*y*	*n*	*y*	*y*
"	3	36	All	0	0	Important	.....	1	.....	0	0	.....		*y*	*y*	*y*
"	3	36	All	0	0	Important method	.....	0	.....	0	0	0	*y*	*n*	*n*	*n*
"	3	2	All	0	0	.....	.....	0	.....	0	*n*	*n*	*y*	*n*	*n*	*n*
Physics	1	18	.....	0	0	Training the intelligence	.....	0	.....	0	.....		*y*	*n*	*n*	*n*
"	2	18	.....			.....	.....	0	0	*or*	*n*	*n*	*y*	*n*	*n*	*n*
"	2	18	2/11	1/24	1/12	*Not raised*	.....	0	0	0	*n*	*n*	*y*	...	*n*	*n*
Chemistry	2	18	3/8	0	1/8	Training the intelligence	.....	15	Quest. and ans.	0	.....		*y*	*n*	*n*	*y*
"	2	18	3/4	0	1/4	None	.....	4	Quest. and ans.	0	.....		*n*	*n*	*n*	*n*
"	1	18	1/8	.....	3/8	Culture—important	.....		Quest. and ans.	0	*n*	*y*	*n*	...	*n*	*n*
"	15	6	1/8	1/8	1/8	Essential	.....	30	.....		*n*	...	*n*	*y*	...	*n*
Botany	3	36	1/2	0	1/2	Important	.....	0	.....	3*r*	*n*	...	*n*	*y*	.....	
"	3	36	3/8	0	1/8	Important	.....	5	.....	1*r* 3	*n*	*y*	*y*	*y*	*y*	*y*
"	10	6	1/2	0	1/2	Utmost	.....	1	0	0	*n*	*n*	.....			

TABLE I (continued)

DATA CONCERNING SPECIAL METHOD COURSES (continued)

SUBJECT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
History	2	36	1/8	o	7/8	importance Training for citizenship	.....	o	.....	1 *or*	.....		*y*	*n*	*n*	*n*
"	2	36	Some	Some	Some	.....		o	.....	o	*n*	*n*	*y*	*n*	*n*	*n*
"	2	36	1/2	1/2	o	Essential	Important	o	.....	o	*n*	*n*	*n*	*n*	*n*	*n*
Man. Train.	1	36	2/5	1/5	2/5	Appreciation	.....	2	Thorndike	8	*or*	*y*	*y*	*y*	*y*	...
Technique of teaching	3	18	.....	1/4	3/4	.....		4	None	.....						
"	3	18	1/3	1/3	1/3	Professional help	.....	18	Strayer	4*r*	Written 4	.....				
Principles of teaching	3	18	Some	Some	Some	Individual needs	.....									
Latin	3	18	1/2	o	1/2	Culture	.....			o	.....			*n*	.....	
"	3	36	Large	Small	Small	Gives a list	Questionable	o	.....	o	o	...	*n*	*n*	*n*	*n*
German	1	36	.....				.....			12	.....					
"	1	36	.....			Culture—practical	.....	o	.....	13 12*r*	*y*—pres. or ab.	*n*	*y*	*n*	*n*	*n*
"	1	18	.....			.....				30*r* 36	*n*	*y*	.....	*y*	...	*y*
French	1	36	3/8	o	1/8	.....				o	o	o	*y*	...	*n*	...
"	1	36	3/8	o	1/8	Culture	.....	1	Outline	o	.....		*y*	*n*	*n*	*n*
Norwegian	2	18	.....			.....				*y-r*	*y or*	*y*	*y*	.....		*n*
Swedish	2	18	1/3	1/3	1/3	.....		o	.....							

* *r*=required; *or*=oral or orally; *y*=yes; *n*=no.

The four lists of answers on courses in English report on special-method courses given by two instructors.

The twelve lists in mathematics report on three instructors.

The five lists in biology report on one instructor.

The three lists in physics report on one instructor.

The four lists in chemistry report on two instructors.

The three lists in botany report on two instructors.

The three lists in history report on one instructor.

The two lists in technique report on two instructors.

The two lists in Latin report on one instructor.

The three lists in German report on one instructor.

The two lists in French report on one instructor.

The two reports in Norwegian and Swedish report on one instructor.

Adding to this list the single reports in the courses in manual training and principles of teaching, we have a total of eighteen instructors whose courses in special method are reported on in Table I.

The first striking feature is the varying amount of time taken by the several courses. The total number of recitations ranged from 18 in three courses in mathematics and 1 each in physics and chemistry, to 108 in all courses in biology, in two courses in botany, and in one course in Latin. The number between range from 27 in two mathematics courses to 90 in one chemistry course. Compared group by group, the science courses in special method demanded more recitation periods than the courses in any other group. Nor does the explanation of this lie in the possibility that these hour say have includedm laboratory periods. They did not except possibly in the cases of six-week (that is, summer) courses in chemistry and in botany. Furthermore, these summer courses did not demand as many recitation hours, though they may have included some laboratory time, as did other similar courses in science in which only the regular single period per recitation is counted.

Does it take two or three times as long to make college students proficient in methods of teaching history as in those of teaching mathematics? Or does a student need to spend twice as much recitation time to acquire his technique of teaching biology as of teaching English? In these terms of measurement botany is three times as difficult as a modern foreign language. It is impossible to answer accurately such questions as those just raised, but the widely varying amounts of time taken by these groups represented lead one to think that the question of time-values in preparation for special technique had never been raised.

This impression is confirmed when one examines certain of these groups separately. Leaving out of account for the present the courses offered during summer sessions, we find that within the department of mathematics special-method courses during two years have demanded 18, 27, or 36 hours recitation of the student, depending solely upon the time at which he happened to enrol for this work. In physics the same instructor has tried doubling the time required to obtain presumably the same result. Indeed, the simple fact of the whole situation, as far as time expenditure is concerned, is that there is an entire lack of what can be termed standardization, as represented in the courses here reported on.

It may be objected, and perhaps truthfully so, that certain courses in special method give better training in specific teaching technique in 18 lessons than other courses do in 108 lessons. Some light is shed on this problem in the answers listed in columns 3, 4, and 5. From these answers it is evident that few courses spent much time in the discussion of (4) historical material, although certain courses in mathematics have devoted three-fourths of their time to this phase. There is far less agreement, however, in the division of time between the discussion of (3) subject-matter and of (5) methods of

teaching. Two courses in English and two in mathematics spent almost all of their time on the last, while one in mathematics, three in biology, one in physics, one in botany, and one in Latin gave nearly the whole emphasis to subject-matter. Of the remainder, more stressed subject-matter than method, while still more were divided equally between these two. These facts, together with a careful study of the table, show that the length of a course in special method is no indication of where the emphasis is being placed in that course by the instructor. He may be taking his class in a review of the subject-matter, he may be going into the historical aspects of the subject's development, or perhaps he is really attempting to accomplish what the title of his course indicates.

This study is not interested in the nature of the discussion of the subject-matter, nor of the historical foundations. It is seeking data on the presentation of methods of teaching. Further light is given in the answers to questions Nos. 8–12 inclusive. Thirty-four of the 47 give answers as to whether any sort of written lesson plans were required. Twenty of the 37 students were not required to write any; 12 were required to write one each; 1 wrote two; 2 wrote four; 1, five; 1, eight; 1, fifteen; 1, eighteen; and 1, thirty. And of these 20, slightly more than a half-dozen were given definite instructions as to how to proceed with this technical task.

But possibly the instructors thought visitation of classes actually being taught would be better than mere making of plans. Of 39 answers whether such visits were required, 18 said they were and 21 said they were not. The number of visits required in each course ranged from one in a course of 72 periods to 18 in a course of 36 periods. Of the courses requiring these visits 5 required no reports to be made on observations and 2 asked students merely whether thay had visited. This leaves among 39 cases a possibility of only 11

chances of there being any discussion of visits made to high-school classes. On the other hand, 10 reports said that the class in method discussed questions of actual classroom procedure observed during visits, and 10 said such questions were not discussed.

It seems quite evident that the special-method courses given by the eighteen instructors reported on gave only very minor consideration to the technique of specific preparation for classroom instruction and made scarcely any attempt to familiarize students to any degree with actual practices pursued by high-school teachers.

Column thirteen states whether these courses considered "the question of suitable textbooks." Twenty-eight answers say "yes"; 9 say "no"; and 7 answers are lacking. After reading the answers given by students to this question one cannot refrain from warning the reader that the foregoing information does not give any clue to the value of this consideration, when present, to the students. One answer stated, for example, that they "considered the textbooks according to the experience the professors had had with them." Another answer said, "In selecting a textbook, Mr. ———— told us to select a text that emphasized the side of [subject] that we were interested in. . . . . We were supposed to use our own judgment in such choices." A number of other answers could be quoted to show that students were obviously given no standards for judging texts even where the question of suitable ones was considered.

Column fourteen shows the extent to which the community needs were given any recognition in the special-methods courses. Fourteen answers say "yes"; 20 say "no." Again the reader is warned that "yes" is no measure of the value of such consideration to future teachers. One student gave such an answer and then added that all his class had been told was

that a certain foreign language should not be taught in a German community.

Question No. 15 also deals with the curriculum: Was a course of minimum essentials formulated? Eleven answer "yes"; twenty-one, "no"; ten did not answer. Question No. 16 seeks to find out whether any attempt was made to prepare prospective teachers to deal specifically with individual differences in pupils. Thirteen answer "yes"; 19, "no"; 11 did not answer. It is interesting to notice that eight discussed special methods for the slow and rapid workers. Five of these eight were mathematics courses.

It must be acknowledged that there are certain possible sources of error in the foregoing data. The students who answered the questions may not have remembered the facts accurately, and hence their answers may be untrustworthy. Two methods were used to overcome this. First, the students were requested to take all the time they needed to formulate their answers. None of them had taken these courses more than a year before. Secondly, they were told that the questions were asked merely to get information and did not in any way help in arriving at any marks to be given the students.

Again it may be objected that the form of some of the questions did not permit of answers specific enough to serve as basis of conclusions. It is conceivable that some might urge this against the questions numbered 6, 9, 14, and 16. This would be a serious objection if the data had been narrowly interpreted. But the method pursued has been most liberal. In making the tabulation the answers have been given a "free translation" with a bias in favor of the instructor whenever there was any doubt, and in the foregoing discussion the analysis has in no instance attempted to give to the answer a content or meaning above what was originally intended. Of this the reader may, by his own critical reading, judge for

himself. The answers in columns six and seven have not even been referred to up to this point.

Furthermore, it has already been pointed out that so far the investigation has limited itself almost wholly to questions of fact: Were lesson plans required? Did you visit classes? Did you report? Did you attempt to formulate a course in minimum essentials? and so on, through the list. In no case was the student asked to evaluate any part of the course which he had been given. The whole inquiry so far concerns the presence or absence of clearly defined elements in these special-method courses.

With this fundamental fact in mind one is justified in drawing the following conclusions from the foregoing data:

1. Either some courses consumed too much time or some took too little. It is quite probable that both conditions were true.

2. There was no clear idea in the minds of the instructors as to what type of content should be given in these courses.

3. There was an appalling lack in most courses of any attempt to prepare students to organize subject-matter for presentation to high-school classes.

4. There was almost no attempt to require students to familiarize themselves to any degree with current practice in teaching the several subjects in high schools, even though there was ample opportunity for this.

5. There was even less discussion of such procedure than there was observation of it.

6. The formulation of the minimum essentials in several subjects, the adaptation of these to the needs of the community and to those of the pupils to be taught, the consideration of the teacher's tool of instruction, the text,—each of these in most courses seemed to be judged unimportant or even nonessential.

The second set of data concerns only the inquiry raised in questions Nos. 6 and 7. At the end of the semester, when these 100 university students were ready to be graduated, i. e., to teach, each was asked to give her reasons why the subject she had been teaching should be given a place in the high-school curriculum. This question was asked of them in a final examination, but they had been told some time before that they might expect it. The answers of eighty-eight students were given in such form as to be usable in this study. These answers are presented tabulated in Table II.

TABLE II

Subject	Number of Students	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total by Subjects
English	16	15	2	14	1	..	6	2	5	1	..	3	1	2	..	52
Mathematics	14	12	10	1	..	9	1	..	8	1	3	1	..	..	..	47
History	13	8	10	8	2	3	6	8	8	..	2	1	..	1	..	57
Science	17	17	5	3	..	7	2	..	6	..	7	..	..	..	1	48
Foreign language	31	25	17	21	..	3	8	1	16	2	3	..	..	..	..	96
Economics and Commercial geography	4	3	2	..	1	1	2	..	1	..	..	..	..	..	..	10
Music	2	1	1	..	..	..	1	..	..	..	1	..	..	..	..	3
Manual training	1	1	1	1	..	..	1	..	..	..	..	..	..	..	..	4
Total	88	82	48	48	5	23	27	11	44	4	16	5	1	3	1	318
Rank	.....	1	2	2	8	5	4	7	3	9	6	8	11	10	11	

The numbers at the top of the columns correspond to the reasons as stated below:

1. Applied use.
2. Development obtained.
3. Culture.
4. Social values.
5. Technique or method acquired.
6. Appreciation.
7. Civic, moral, or ethical training.
8. Value in studying other subjects.
9. Good because the study of it is "hard discipline."
10. Has interest in it.
11. College-entrance requirement.
12. Individual values.
13. Ability in subject a measure of life-success.
14. Good for leisure.

The answers are presented from groups of students teaching in given fields such as science, English, etc. These answers are totaled.

The separate reasons listed are necessarily to a limited extent groupings of answers given. At the same time there has not been any attempt to make these statements of reasons logically exclusive one from another. A consistent effort has been made to retain the significance of each original statement.

In the divisions of English, mathematics, history, science, and foreign language enough answers are included to make the individual group data worth attention. Among these five "applied use" is ranked first in all but history, where "development" is given first place. "Culture" is ranked second in English, in history, and in foreign language, and in the last it is rated as equivalent to "applied use "to "civic, moral, and ethical training," and to "value in studying other subjects." "Interest" is given second rank in science and rated as equivalent to "technique or method acquired."

Including all reasons given by the 88 students for all subjects, the rankings, judged by the method of "number of times mentioned," are as follows:

1. Applied use.
2. Culture and social values.
3. Value in studying other subjects.
4. Appreciation.
5. Technique or method acquired.
6. Has interest in it.
7. Civic, moral, or ethical training.
8. Social values and college-entrance requirements.
9. "Hard discipline."
10. A measure of life-success.
11. Individual values and leisure.

It is very evident that the students whose answers furnished the data for Table II were not going to their teaching positions with clean-cut, cogent opinions as to why the subjects which they expected to teach should be taught high-school pupils.

Sound method begins with a clear statement of aim or goal to be achieved. This goal constitutes the only valid reason for procedure toward it. If the subject does not lend itself to an aim that stands the test of the purpose of the School, no selection of subject-matter or method of instruction can possibly overbalance this deficit. In fact, the three parts of method other than the determination of aim are dependent upon the aim. They are: (1) the selection, (2) the organization, and (3) the presentation of subject-matter so that the aim set up will be accomplished or reached.

The data presented give meager evidence that these fundamental principles of method have been thought of by the instructors in the special-method courses. No matter how great one's zeal, one looks almost in vain, among college instructors or among prospective teachers, for any evidence that the high school is thought of as the "people's school." A socialized school; a school, a course, a study, for community or for individual needs—these are ideas almost as lacking in college contemplation for high-school preparation as they are overwhelmingly necessary in actual secondary instruction and supervision.

In short, one seems perfectly justified in saying that as a whole these courses failed either to possess or to state a distinct aim for the several high-school subjects which they fathered. The Senior university students who took them failed lamentably to get a clear idea of what these subjects were expected to accomplish in specific terms for high-school pupils. And as for attacking problems of technique in selection, organization, presentation, and adaption, the courses betray a poverty that shows almost a total dearth of intelligent, sympathetic interpretation of the meaning or value of teaching in the modern secondary school in America.

MEASURED RESULTS OF SUPERVISED STUDY

FREDERICK S. BREED
University of Chicago

INTRODUCTION AND STATEMENT OF PROBLEM

Probably no other movement, unless it be the junior-high-school movement, is arousing more interest among students of secondary education than the movement for supervised study. Dating its inception from the beginning of the Batavia plan in the late nineties, receiving new impetus from the work of investigators and progressive school men since 1910, this movement during the last five or six years has attracted a rapidly increasing amount of attention, certainly more than any other proposed reform in the field of secondary-school methods of instruction.

When, therefore, some three years ago, Professor C. H. Judd, addressing the Michigan Schoolmasters' Club, proposed that the members undertake the co-operative study of important high-school problems, the committee[1] which was appointed to act on this suggestion turned quite naturally to the problem of supervised study. In view of the increasingly wide adoption of the method, the claims that were made for its efficiency, and the relatively small amount of experimental evidence in substantiation of these claims, the committee decided to undertake an experimental study, under actual school conditions, with

[1]This investigation was conducted under the auspices of the Michigan Schoolmasters' Club, by which it was financially supported. The committee appointed by Professor C. O. Davis, president of the Club, was as follows: Superintendent W. B. Arbaugh; Professor F. S. Breed, chairman; Professor J. P. Everett; Superintendent E. E. Fell; Superintendent S. O. Hartwell; State Superintendent F. L. Keeler; Principal E. L. Miller; Principal Wm. Prakken; Principal P. C. Stetson; and Superintendent E. C. Warriner. The committee completed the organization of its work at a meeting in Grand Rapids.

the aim of throwing additional light on the effectiveness of a common form of organization of supervised study, namely, that exemplified in the divided-period plan and the double-period plan. While selective from the standpoint of differences in subject, these plans are not rigidly selective from the standpoint of differences in ability of pupils. In fact they may be characterized as relatively indiscriminate, not selective, from the standpoint of ability differences. The question might well be raised: Do the divided- and double-period plans represent the limit of differentiation of organization and method in the evolution of supervised study?

The investigation was made possible by the careful co-operation of principals and teachers in the high schools named below. The readiness, even enthusiasm, of their participation was a pleasure to the committee, not only because of the promise it held for the successful issue of the experiment, but also because this spirit seemed indicative of that new era in secondary education when the scientific study of professional problems will be widely welcomed and prosecuted by the teaching personnel in this field. In the opinion of the writer, even now it may be said that the more complete invasion of the secondary field by the scientific methods that have proved so successful in the field of elementary education is being retarded not so much by lagging teachers as by lacking leaders. The list of co-operating high schools follows: Albion; Battle Creek; Detroit Northwestern; Gilbert, Minnesota; Grand Rapids Central; Grand Rapids South; Grand Rapids Union; Highland Park; Holland; Houghton; Muskegon; Port Huron; Saginaw; and Three Rivers.

PREVIOUS INVESTIGATIONS

Published reports relating to the efficiency of supervised study may be classified roughly into three groups according as they are based on:

(1) Unsubstantiated opinion,
(2) Statistical data,
(3) Experimental results.

Reports of the first type need not concern us here.

It will be profitable, however, to note briefly a few representative studies of the second type.

Wiener ('14) reported favorable results for the divided-period plan in the Central Commercial and Manual Training High School of Newark, New Jersey. There was no apparent attempt to control conditions during the trial of the method. Conclusions were based on promotion percentages.

Brown ('15) made a similar report for the double-period plan adopted in the Joliet High School in 1910. Conclusions were based on a fairly consistent decrease in the percentage of failures after the adoption of the plan.

Loveland ('15) reported satisfactory results from a trial of the study-class plan which had been in operation in the high school of Pottstown, Pa., for about six years. Non-promotion data for the six years showed a higher average percentage of failures during the last three than during the first three years of the period. The corresponding elimination percentage showed a decrease.

Hall-Quest ('16) on the basis of decrease in the percentage of failures justified the amount of time devoted to the eclectic plan of supervised study in the high school of Cairo, Ill.

Cole ('17) has given an account of one year of supervised study in the Broadway High School of Seattle. A decrease in the percentage of subjects failed, which his data exhibit, was taken as a criterion of the effectiveness of supervised study.

The method of investigation pursued in these studies warrants a brief comment. The object of study in each case was a method of instruction. The method of investigation was comparative. Comparison was made between supervision and non-supervision to determine their relative merits. In a comparison of this sort the superiority of the method is evidenced by its greater efficacy as a means in producing progress or improvement or desired change. Manifestly the most acceptable measure of improvement is a direct measure of it. It is

interesting to note, however, that in all five of the statistical studies referred to, which are typical of the statistical group, promotion rate, in one form or another, was used as the criterion or measure of efficiency. That is, in all of these studies improvement was measured not directly, but indirectly through promotion rate, a method which has been unfavorably criticised by previous investigators.

Implicit in the use of promotion rate as a measure of improvement is the assumption that there is a very close, if not exact, correspondence between rate of promotion and rate of improvement. This assumption still awaits verification. It will probably be found invalid. The percentage of pupils passing, or the promotion rate, is determined by many factors in addition to improvement. Promotion rate, like the passing mark, where properly determined, depends primarily upon the educational aim. According as the aim is the education of leaders, education of the masses, maintenance of standards, and so on, the passing mark will vary. Furthermore, in the opinion of investigators and practical experts, pressure of numbers, limitations of space, force of tradition, size of pupils—these and other factors enter into the situation as additional determinants. Examine, for example, the following samples of decreases in the percentage of failures on which Hall-Quest above justified the plan of study supervision in vogue at Cairo, Ill.:

Algebra I,	28-23 per cent
Latin I,	33-25 " "
Stenography I,	24- 0 " "
Bookkeeping I,	25- 0 " "

That is, Algebra I and Latin I, not ordinarily supervised and ordinarily thought to lend thmselves easily to a program of supervision, showed decreases of failures of 5 and 8 per cent, respectively; while stenography and bookkeeping, ordinarily

supervised to a considerable extent, showed decreases of 24 and 25 per cent, respectively. One is led to suspect that factors other than improvement affected these decreases. It is easily conceivable that the percentage of failures in a given school might, within a brief term of years, be greatly decreased with no concomitant variation in the amount of improvement of pupils.

These statistical studies, therefore, are open to two fundamental objections:

(1) They lack the necessary control of conditions,

(2) They employ an unsatisfactory criterion of improvement.

In the secondary field little has been done experimentally on the problem of supervised study. Breslich ('12) conducted the first important experimental investigation. His study was made in the University High School of the University of Chicago. He used two comparable classes in first-year algebra, one of which was given supervised study without home work, the other home work without supervised study. The more significant results were derived from fourteen lessons. His essential conclusions were:

(1) That there was a slight average gain for supervised study, and

(2) That poor students profited particularly by it.

The experimental data seem to warrant a definite statement to the effect that good students evidently lost by the method, about which something will be said in a later section of this report.

Minnick ('13) tested supervised study in Bloomington, Ind., with two groups in plane geometry, of equal ability as determined by previous grades in algebra. On the basis of both recitation and examination grades for a period of fifteen

weeks, the average performance of the supervised class surpassed that of the unsupervised. No separate study of bright and dull pupils was made.

In both of these experiments important conditions were carefully controlled and a direct measure of improvement was employed.

In view of the inadequacy of the statistical method in connection with the present problem, in view of the fact that the important experimental studies of the problem are limited to two in the secondary field, in view also of the fact that these in turn are limited to a study of only two classes each, and in one case to a period of only three weeks so far as the essential findings are concerned, it is evident that there is need for a more considerable body of experimental data upon which to base conclusions regarding the effectiveness of supervised study.

METHOD AND MATERIAL

General plan of experimentation.—After the co-operation of the desired schools had been secured, the principals of these schools and the teachers who had consented to take part in the experiment were provided with mimeographed copies of the following general directions for the conduct of the experiment:

General Directions

1. Conduct the experiment in first-year Latin, first-year algebra, or ninth-grade English composition.
2. In the selection of classes for the experiment, give preference to the slower sections.
3. Employ the divided-period plan of supervising study, for which use
   a) A one-hour period (50 minutes can be adapted), of which
   b) The recitation shall occupy 30 minutes,
   c) Assignment and supervision of study the rest.
4. Assignments, now stressed more than ever, should be made unusually definite and clear.

5. Supervision of study follows the assignment and includes attention both to subject-matter and to methods of learning.
6. Provide the teacher with a list of definite practical rules on "How to Study" (the committee will furnish these), based on scientific studies of the learning process.
7. Have the teacher master these rules and help the pupils to apply them in the course of their study.
8. Select for the supervision of study teachers who are known to be interested
   a) In undertaking the experiment, and
   b) In teaching pupils how to study.
9. Use one of the following plans of experimentation:

PLAN I

a) One teacher.

b) Two sections of the same grade, of equal size, and of equal ability as determined by

c) Preliminary test alike for both sections, devised by the teacher. (Shift pupils so that the average scores of the sections are, as nearly as possible, the same. Mid-year marks in the subject chosen for the experiment may be used instead of the preliminary test, where the sections have had the same mid-year examination paper.)

d) Sections to be known as A and B.

e) Section A, practice group, one-hour (or 50-minute) period, with supervised study, time distributed according to Direction 3.

f) Section B, control group, length of period same as in Section A, ordinary recitation.

g) Both sections, with subject-matter the same in kind and amount (the amount had better be a little too large than too small), continue work for six weeks, then

h) Semifinal test, same for both sections, devised by teacher.

i) Now, under the same teacher, reverse the procedure for the next six weeks, giving supervised study to Section B, the ordinary recitation to Section A.

j) Both sections cover the same work.

k) Final test, same for both sections, devised by teacher.

l) Construct all tests so that nobody can do everything and everybody can do something. A series of questions differing in difficulty, but not necessarily arranged in order of difficulty, will meet this condition best.

m) All test papers, with questions, to be forwarded to the Education Laboratory of the University of Michigan for a second scoring which will be averaged with the teacher's scores.

n) Teacher will report scores on blank provided especially for the purpose.

PLAN II

a) Two teachers.

b) Two sections of the same grade, of equal size, and of equal ability as determined by

c) Preliminary test alike for both sections, devised by the two teachers in co-operation. (Shift pupils as above. Mid-year marks may be used, as above.)

d) Sections to be known as A and B.

e) Teachers to be known as X and Y.

f) Section A, with Teacher X, practice group, one-hour period (or 50-minute), with supervised study, time distributed according to Direction 3.

g) Section B, Teacher Y, control group, length of period same as in Section A, ordinary recitation.

h) Both sections, with subject-matter the same in kind and amount (the amount had better be a little too large than too small), continue work for six weeks, then

i) Semifinal test, same for both sections, devised by teachers in co-operation.

j) Now exchange teachers, assigning Teacher Y to Section A and Teacher X to Section B, continuing supervised study in Section A and the ordinary recitation method in Section B.

k) Both sections cover the same work, six weeks.

l) Final test, same for both sections, devised by the two teachers in co-operation.

m) Construct all tests so that nobody can do everything and everybody can do something. A series of questions differing in difficulty, but

not necessarily arranged in order of difficulty, will meet this condition best.

n) Forward questions and papers to the Education Laboratory of the University of Michigan.

o) Report scores on blank provided.

Both of the above plans involved the use of two classes. After the classes were made comparable in ability and subject-matter, the teacher variable was the important one to control. Plan I seemed to be the best of several possible plans because of its simple control of this variable through the use of only one teacher, and also because of its adaptability to ordinary school conditions. The exchange of methods at the semifinal in this plan operated as a control of class variability additional to testing.

Plan II, with two teachers instead of one, and exchange of teachers instead of methods at the semifinal test, was inferior to Plan I from both the scientific and the practical point of view. The teaching was less constant in quality in Plan II than in Plan I, and the exchange of teachers involved a procedure that would not ordinarily be approved by supervisors. This plan, however, permitted comparison of the two methods in question when subject-matter was identical, variation in teaching was equalized by the law of averages, and classes were equalized in ability by test.

Either one of the plans described seemed to offer advantages over other possible plans such as arranging (1) two classes with two teachers and providing for exchange of methods, (2) two classes with two teachers and exchanging both methods and teachers, and (3) one class with one teacher, changing the method, and with it, necessarily, subject-matter.

Since it was already manifest at the time the experiment was undertaken that teachers find considerable difficulty in acquiring the technique of supervising study, the list of general

suggestions given below was provided along with the general directions. These suggestions were meant to embody the theory and practice of the divided-time scheme of supervision, as explained in the published descriptions of its advocates. No attempt was made to keep the suggestions logically distinct. Practical suggestiveness was the purpose of the list, not logical analysis.

SUGGESTIONS FOR THE SUPERVISION OF STUDY

Supervision of study means:

Correcting the defects of mass-teaching;
Individualizing instruction;
Recognizing the psychology of individual differences;
Supervising study *in the teacher's classroom;*
Directing the pupil's effort;
Anticipating the pupil's difficulties;
Working *with* the pupil, but not *for* him;
Helping the pupil *judiciously;*
Training pupils how to study;
Making a real laboratory of every classroom;
Increasing the importance of the assignment—so much so that supervised study has been described as giving an elaborate and co-operative assignment;
Inspecting the work of the pupils as they study the assignment;
Devoting most time to the lowest third of the class;
Giving extra work or practicing the doctrine of the limitation of training in the case of the highest third;
Decreasing the amount of home study;
Increasing the amount of school study;
Proceeding, in general, somewhat as follows:

"The pupils have begun to work. The getting ready process must be prompt and precise with a minimum of noise. No questions are permitted audibly, but by raising the hand the pupil indicates a desire to consult the teachers who passes quietly to the pupil's desk. The pupil and teacher in whispers confer on the difficulty. When not so occupied, the teacher moves quietly up and down the aisles stopping at each desk to inspect each pupil's work. When she finds a pupil employing a wrong method, she stops and in low tone,

asks why he used this method. She always requires the pupil to give a reason for what he does. The pupil is expected to make his own corrections with a minimum of suggestion from the teacher. When absolutely necessary to do so, she will give the required information. There is nothing gained under such circumstances by sending the pupil on a long hunt for the facts. Valuable time is saved by telling him what he probably could not have discovered for himself."

Finally, in the matter of method, each participating teacher was provided with a mimeographed list of rules to be used in instructing pupils how to study. These, thirty-seven in number, were taken from Whipple.[1] These rules were selected, first, because it was desired to make the teaching as scientific as possible, secondly, because it is evident that the psychology of learning constitutes the scientific basis for instruction in methods of study, and, lastly, because Whipple's list is a convenient and reliable list based on this psychology.

Some variations from the general plan.—The experiment as thus outlined, with the following exceptions or variations, was conducted during the second semester of the regular school year. Although no school was asked to carry out the experiment in more than one subject, three schools attempted it in two subjects each. While the divided-period was recommended, schools preferring or already using the double-period plan were accepted, for it was recognized that no fundamental requirement of the experiment was violated by this variation. Though there was some variation among schools in the length of class periods, this difference was of no significance, because comparisons were not made between schools.

The schools very generally chose Plan I in preference to Plan II. This was due, no doubt, to the requirement in Plan II that the teachers of sections be exchanged during the semester. One school, however, carried out Plan II satisfactorily. There was some variation from the six-week period between

[1] G. M. Whipple, *How to Study Effectively*, Public School Publishing Co., Bloomington, Ill.

the preliminary and semifinal, and between the semifinal and final tests. On account of the position in the calendar of a vacation or a regular monthly test, the specified period was in a few cases slightly modified. But, again, compared groups were treated with uniformity in this respect. Variations of the kind described were permitted in order that the experiment might be adjusted as naturally as possible to the regular work of the schools, the principles of scientific procedure alone taking precedence over this principle.

With these variations the general scheme of experimentation, as outlined, was undertaken in the hope that it might be possible to measure the value of supervised study, of the type specified, in good high schools under ordinary school conditions, when the method was employed by willing and capable teachers few of whom pretended to expertness in the technique of study supervision.

RESULTS

Reporting data and scoring papers.—The schools co-operating in the experiment reported their data on a printed blank 8½ × 17½ inches, provided by the committee. This blank is reproduced below:

Report Blank

Direction:—Use one copy of this blank for the preliminary and semifinal scores, another for the final scores. As soon as possible after the semifinal test, and also after the final, forward copies of the tests, the students' papers, and the report to F. S. Breed, Department of Education, Tappan Hall, Ann Arbor, Michigan.

High School.....Grade.....Subject.....
First or second half-year in subject.....No. of periods per week.....
Length of period.....minutes, Recitation.....minutes,
Supervised study.....minutes, Divided or double period.....
Experimental plan, I or II.....No. of weeks, preliminary to semi-final....
Semifinal to final.....

SECTION A [ ] Supervised Study [ ] No Supervised Study Teacher.....						SECTION B [ ] Supervised Study [ ] No Supervised Study Teacher.....					
Score in Tests (In percentage)				Improvement (Leave vacant)		Score in Tests (In percentage)				Improvement (Leave vacant)	
Date						Date					
Names of Pupils (Arrange alphabetically)	Preliminary or mid-year	Semifinal	Final			Names of Pupils (Arrange alphabetically)	Preliminary or mid-year	Semifinal	Final		

As will be noticed in an examination of the general directions and the report blank, the teachers were asked to send the test questions and the pupils' test papers, along with a report of the individual scores in all tests, to the writer. The papers, which gave evidence of having been carefully scored, were all scored a second time by competent persons in accordance with specifically prepared instructions. These scorers were selected on the basis of scholarship, practice or study of teaching, and specialization in the field in which the papers were written, and were paid for their work. The same individual in each case scored all the papers of two compared classes.

Results based on continuous groups.—A careful examination of the data showed that there would be little value in a method of treatment of results that assumed classes as grouped by the teachers to be strictly comparable. This situation was further complicated by the fact that there were many classes in which absences occurred on the date of tests. Instead, therefore, of using for each test averages based on percentages of all pupils for whom there were records, and thus using data derived from a partially different set of pupils in each test, it was decided to construct the first tables of results on the basis of what shall

be called, for want of a better term, *continuous groups*, that is, groups composed of those pupils who participated in all the tests and including no others.

Three sets of averages were computed for these continuous groups—one from the teachers' scores, another from the laboratory scores, and a third, termed the combined score, from these two averages. Final judgments were based primarily upon the combined score.

Table I shows the results for twenty first-year algebra classes in terms of percentage of excess of improvement when the classes were compared on the basis of continuous groups. The following references to the table will indicate how it should be read: In High School IV the two classes compared had enrollments of 11 and 13, respectively; the frequencies or numbers in the continuous groups were 11 and 12; the preliminary scores for the continuous groups were 81.5 and 81.4 per cent, the former being the preliminary percentage of the supervised group, the latter of the unsupervised. From the preliminary to the semifinal test the average improvement of the supervised group exceeded that of the unsupervised by 12 per cent, according to the teacher's scores; by 10.1 per cent, according to the laboratory scores; and by 11.1 per cent, according to the combined scores In the next section of the table, Preliminary to Semifinal (B), the above values are repeated for the sake of clearness, with the omission of values for those classes that failed to reverse the method or continue the experiment after the semifinal test. The last section of the table shows the relative improvement from the semifinal to the final test for the same groups as appear in the preceding section, after unsupervised study had taken the place of supervised and vice versa. The percentages representing excess of improvement per pupil in the same order as before are 9.8, 13.3, and 11.6, no allowance being made for unequal

standing at the preliminary test. In both periods of the experiment improvement was computed from the preliminary scores. In later tabulations allowance is made for semifinal gains and losses in computing final gains and losses.

In the two columns of averages are inserted the average percentages of excess per pupil under the two methods. The excess percentages of ten supervised groups averaged by the combined scores 3.2 (middle column); the excess percentages of the ten unsupervised groups, according to the combined scores, averaged 3.3. The net excess of improvement, computed from the combined scores, was thus inappreciably on the side of unsupervised study.

In five pairs of classes supervised study showed the greater relative gain; in the other five, unsupervised study. When in the same manner the results for the fourteen groups that completed both parts of Plan I are considered, it is observed that from the preliminary to the semifinal test the unsupervised groups showed, if anything, a shade of advantage over the supervised, and when the methods in the compared groups were exchanged, the unsupervised classes exhibited the pronounced average excess of improvement of 5.1 per cent. No class having supervised study between the semifinal and final tests equaled or exceeded in improvement its corresponding unsupervised class. So much for the results of supervised study in the algebra classes, when based on continuous groups.

In Table II are presented the results from six first-year Latin classes when treated by the same method. It will be observed that the net excess of improvement was markedly greater on the side of supervision from the preliminary to the semifinal test—10.3 per cent when the results from six classes were considered, and 9 per cent when four classes were considered. From the semifinal to the final test the classes that

TABLE I

Percentage of Excess of Improvement in Continuous Groups under Supervised and Unsupervised Study in First-Year Algebra

Character of class data	High School										Av.	High School										Av.
	II	III	IV	VII	VIII	IX	X	XI	XII	XIII		II	III	IV	VII	VIII	IX	X	XI	XII	XIII	
Enrolment	24	15	11	23	19	17	12	18	19	17	17.5	24	15	13	21	16	15	12	21	24	21	18.2
Frequency	20	15	11	20	18	15	12	14	19	17	16.1	19	15	12	20	16	15	9	13	24	19	16.2
Preliminary Score	72.5	39.7	81.5	84.9	72.3	85.8	56.0	81.4	83.2	53.0	71.0	73.1	57.6	81.4	87.6	81.6	85.7	56.5	80.2	86.1	59.4	74.9
Excess of improvement				**Supervised**					**Preliminary to Semifinal (A)**										**Unsupervised**			
By teacher's scores	....	4.6	12.0	....	8.0	3.3	....	....	....	4.4	2.9	10.4	....	....	2.4	....	....	4.2	5.9	12.1	....	4.0
By laboratory scores	....	4.5	10.1	4.9	9.5	5.7	....	....	....	4.1	3.7	10.3	....	....	....	....	....	3.1	3.9	8.4	....	2.9
By combined scores	....	4.5	11.1	1.3	8.7	4.6	....	....	....	4.2	3.2	10.4	....	....	....	....	....	3.7	4.9	10.3	....	3.3
Av. net excess	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.1
				Supervised					**Preliminary to Semifinal (B)**										**Unsupervised**			
By teacher's scores	....	4.6	12.0	....	....	....	....	....	....	4.4	2.5	10.4	....	....	2.4	....	....	4.2	5.9	....	....	3.4
By laboratory scores	....	4.5	10.1	4.9	....	....	....	....	....	4.1	3.2	10.3	....	....	....	....	....	3.1	3.9	....	....	2.6
By combined scores	....	4.5	11.1	1.3	....	....	....	....	....	4.2	2.6	10.4	....	....	....	....	....	3.7	4.9	....	....	2.8
Av. net excess	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.2
				Unsupervised					**Semifinal to Final**										**Supervised**			
By teacher's scores	.4	13.2	9.8	1.6	....	....	2.5	9.8	....	5.9	5.6	....	....	....	....	....	....	....	....	....	....	.0
By laboratory scores	1.2	11.3	13.3	1.7	....	....	.5	3.9	....	7.1	5.1	....	....	....	....	....	....	....	....	....	....	.0
By combined scores	....	12.3	11.6	1.6	....	....	1.5	6.8	....	6.5	5.2	.5	....	....	....	....	....	....	....	....	....	.1
Av. net excess	....	....	....	....	....	....	....	....	....	....	5.1	....	....	....	....	....	....	....	....	....	....	....

TABLE II

PERCENTAGE OF EXCESS OF IMPROVEMENT IN CONTINUOUS GROUPS UNDER SUPERVISED AND UNSUPERVISED STUDY IN FIRST-YEAR LATIN

Character of Class Data	HIGH SCHOOL			Av.	HIGH SCHOOL			Av.
	I	IX	X		I	IX	X	
Enrolment	13	19	17	16.3	13	15	17	15
Frequency	13	16	14	14.3	12	13	14	13
Preliminary score	87.4	86.7	64.7	79.6	85.5	84.8	74.1	81.5
Excess of Improvement	Preliminary to Semifinal (A)							
	Supervised				Unsupervised			
By teacher's scores	1.9	11.1	18.8	10.8	....	....	....	0.
By laboratory scores	5.7	14.0	9.0	9.9	....	....	....	0.
By combined scores	3.8	12.6	13.9	10.3	....	....	....	0.
Av. net excess	....	....	....	**10.3**	....	....	....	
	Preliminary to Semifinal (B)							
	Supervised				Unsupervised			
By teacher's scores	1.9	....	18.8	10.7	....	....	....	0.
By laboratory scores	5.7	....	9.0	7.4	....	....	....	0.
By combined scores	3.8	....	13.9	9.0	....	....	....	0.
Av. net excess	....	....	....	**9.0**	....	....	....	
	Semifinal to Final							
	Unsupervised				Supervised			
By teacher's scores	....	....	5.7	3.0	2.2	....	....	1.0
By laboratory scores	....	....	10.7	5.5	7.9	....	....	3.6
By combined scores	....	....	8.2	4.3	5.1	....	....	2.4
Av. net excess	....	....	....	**1.9**	....	....	....	....

TABLE III

PERCENTAGE OF EXCESS OF IMPROVEMENT IN CONTINUOUS GROUPS UNDER SUPERVISED AND UNSUPERVISED STUDY IN NINTH-GRADE ENGLISH COMPOSITION

Character of Class Data	HIGH SCHOOL II	HIGH SCHOOL V	HIGH SCHOOL XIV	Av.	HIGH SCHOOL II	HIGH SCHOOL V	HIGH SCHOOL XIV	Av.
Enrolment	19	17	16	17.3	23	20	16	19.7
Frequency	19	15	13	15.7	23	12	13	16.0
Preliminary score	86.1	70.5	80.4	79.0	88.3	64.0	85.2	79.2
Excess of Improvement	**Preliminary to Semifinal (A)**							
	Supervised				**Unsupervised**			
By teacher's scores	....	....	1.0	.3	1.8	9.2	....	3.2
By laboratory scores	....	....	.3	.1	.9	10.1	....	3.0
By combined scores	....	....	.7	.2	1.4	9.7	....	3.1
Av. net excess	....	....	....	....	....	....	....	**2.9**
	Preliminary to Semifinal (B)							
	Supervised				**Unsupervised**			
By teacher's scores	....	....	1.0	.5	....	9.2	....	4.4
By laboratory scores	....	....	.3	.1	....	10.1	....	4.8
By combined scores	....	....	.7	.3	....	9.7	....	4.7
Av. net excess	....	....	....	....	....	....	....	**4.4**
	Semifinal to Final							
	Unsupervised				**Supervised**			
By teacher's scores	....	....	....	.0	....	1.4	.8	1.1
By laboratory scores	....	....	2.5	1.2	....	2.2	....	1.1
By combined scores	....	....	.8	.4	....	1.8	....	.9
Av. net excess	....	....	....	....	....	....	....	**.5**

changed from supervised to unsupervised study showed a distinct loss—from an excess of 9 per cent to one of 1.9 per cent.

Table III contains the results computed by the same method for six classes in ninth-grade English composition. The unsupervised classes developed an average improvement per pupil 2.9 per cent greater than the supervised classes during the period from the preliminary to the semifinal test. Two of these classes showed with unsupervised study an excess improvement in the first period of the experiment of 4.4 per cent, and when the methods of study were exchanged, these same two classes dropped in the final test to an excess of .5 per cent over the classes whose study was supervised. In other words, the unsupervised English classes, when compared with the supervised, showed a greater relative improvement in the second period of the experiment as well as in the first period.

[To be continued]

Educational News and Editorial Comment

SOCIAL STUDIES IN PUBLIC SCHOOLS

During the academic year 1917–18 the Bureau of Education in co-operation with the Food Administration of the United States published a series of lessons entitled *Lessons in Community and National Life*. These lessons dealt with topics appropriate to classes studying community civics. There were lessons on international trade relations, on colonial and modern manufacturing methods, and on other subjects not likely to excite any question in the minds of the most conservative students of society. In the course of the preparation of lessons on society it became necessary for the editors of this series to introduce some matters which are less commonly discussed in public schools. The fact that there are labor organizations and that these organizations represent a definite movement

The *School Review* is published monthly from September to June by the University of Chicago. It is edited and managed by the Department of Education as one of a series of educational publications. The series, including also the *Elementary School Journal* and the *Supplementary Educational Monographs*, is under a joint editorial committee and covers the entire field of educational interests.

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in the industrial world which must be recognized was discussed in certain of the lessons. The problems of social insurance and governmental control of industries were discussed. The editors were very careful to see to it that in all of these discussions examples were chosen from such sources that the national government would be in no wise compromised through the publication of the accounts by the Bureau of Education. Fortunately the federal government of the United States has taken a good deal of interest in a number of these matters; and in the reports of a number of commissions, as well as in actual legislation, the government of the United States has shown itself to be a progressive social agency.

The lessons prepared by the Bureau found a wide use in the public schools of the United States. Now comes the reaction on the part of conservatives. This reaction is significant because it indicates the sources of opposition to a type of study which is sure to become increasingly common in the schools of this country. It is idle to believe that a nation that has been as deeply stirred as has this will shut its eyes and its mind to a discussion of social problems. It is also idle to believe that the children in the public schools of this country are to remain uninformed on matters of progressive social legislation.

That the meager and very careful discussion of these problems in the lessons published by the Bureau was enough to stir up opposition is made clear by the following extract from a New York daily of January 24:

> Magnus W. Alexander, managing director of the National Industrial Conference Board, has made an attack here upon a textbook, *Lessons in Community and National Life*, which, he said, Secretary of the Interior Lane was attempting to introduce into the public schools of the country, with the approval of President Wilson.
>
> Addressing the National Boot and Shoe Manufacturers' Association, Mr. Alexander asked its co-operation to induce the Interior Department to with-

draw its support of the book, "before it really began its insidious work in the schools." He doubted if the President "could possibly have seen what was to follow his advocacy of the work."

The speaker asserted that the book contained "unwarranted propaganda favoring social insurance, industrial insurance, labor unionism, and governmental control of private activity.

One effect of this attack by Mr. Alexander is exhibited in the following editorial from the *Capital Daily Press* of Bismarck, North Dakota. This editorial is quoted, not because the writer of the present editorial sympathizes fully with all of its views, but because it shows that any effort to close the schools to a full consideration of social problems is sure to arouse violent partisan feelings and misinterpretations.

Wilson Called a Bolshevik

President Wilson recently saw fit to write a foreword indorsing a book, *Lessons in Community and National Life*, by Professors Judd and Marshall of the University of Chicago. This book is used as a textbook in certain schools.

This has caused an indignant clamor from our American junkers. M. W. Alexander, manager of the National Industrial Council Board—whatever that is—severely condemned the book at a convention of the National Shoe Manufacturers' Association and appealed to the bootmakers to bring all possible pressure to bear upon Congress to stop the distribution of the book in the schools.

Mr. Alexander termed the book "a menace to the inherent rights of the juvenile population to be free until they have attained sufficient maturity to choose for themselves the course they intend to pursue in life."

The book, it seems, favors social insurance, labor unionism, the eight-hour day, and government control of public utilities.

This, of course, is sufficient to condemn it in the eyes of stupid Bourbons like Mr. Alexander, and they are greatly concerned lest any such doctrine become inculcated in the "plastic minds of our youth."

This uproar is screamingly funny. For generations the reactionaries have maintained their grip on the control of our educational institutions, and from the kindergarten to college, the "plastic minds of our youth" have been sedulously taught the superior sacredness of private property and the supremacy of dollar rights over human rights. This is the one thing that has made

political and industrial progress so disappointingly slow. In order to gain converts to the cause of social justice it has been necessary to offset the false and pernicious doctrine deliberately taught in the schools and re-educate people to the real facts of political economy and the genuine fundamentals of life.

This perversion of education and prostitution of "learning" has been the strongest bulwark of entrenched privilege. More than any other one thing it has enabled the profiteers to fool the people and retain their unfair monopolies.

No wonder spokesmen of Big Business protest when a book which evidently discusses modern industrial problems accidentally creeps into the schools. No wonder they become almost hysterical at the prospect that the "plastic minds of our youth" may be fed with facts instead of being cunningly poisoned by capitalistic propaganda. No wonder they call President Wilson a Bolshevik because he has indorsed such a work.

It is very amusing, watching these King Canutes of privilege vainly trying to sweep back the tides of democracy which are soon to overwhelm them.

And in the meantime they are advertising the book and it probably will run into fresh editions. The sensible thing would have been to have bought up all the copies and quietly suppressed the work. Now it is too late. Mr. Alexander will find that advertising pays. He also will find that you can't imprison an idea or suppress facts by congressional enactment.

Even the schools—long the stronghold of privilege—are learning the truth and it spells the speedy doom of our reactionary Mr. Alexanders and all these stupid spokesmen stand for.

Nor does the reaction against Mr. Alexander's position come merely from the radical papers of the Northwest. The *New York World* reports in a full column the meeting at which Mr. Alexander spoke. The reporter at this meeting evidently had a sufficient sense of humor to see the absurdity of Mr. Alexander's remarks and writes at some length about the whole situation:

Delegates to the convention of the National Boot and Shoe Manufacturers' Association at the Hotel Astor Wednesday were alarmed when Magnus W. Alexander, managing director of the National Industrial Conference Board, told them that the government in publishing a series of *Lessons in*

Community and National Life was spreading "insidious, unwarranted propaganda, particularly injurious for reading by youth in the plastic age when youth is inclined to take for granted and as proved all that is said through the medium of the books in his classroom."

The delegates were still more alarmed when Mr. Alexander told them these lessons were sponsored by President Wilson, backed by Secretary Lane, and distributed among the schools where they would "mould opinion in favor of social insurance, labor unionism, the eight-hour day, industrial insurance, and governmental control of private activity."

A reporter for *The World* was alarmed too and looked up the lessons. He found that they were published last year, that they bore the imprint of the Bureau of Education of the Department of the Interior, "in co-operation with the United States Food Administration," and that they had been prepared under the direction of Charles H. Judd, director of the School of Education, University of Chicago, and Leon C. Marshall, dean of the School of Commerce and Administration, University of Chicago, which the reporter recalled was endowed by the well-known Socialist, John D. Rockefeller.

More alarmed than ever the reporter found it was quite true that the President had sponsored the lessons, for under date of August 23, 1917, he wrote from the White House "To School Officers":

"The war is bringing to the minds of our people a new appreciation of the problems of national life and a deeper understanding of the meaning and aims of democracy. . . . . I urge that teachers and other school officers increase materially the time and attention devoted to instruction bearing directly on the problems of community and national life.

"In order that there may be definite material at hand with which the schools may at once expand their teaching, I have asked Mr. Hoover and Commissioner Claxton to organize the proper agencies for the preparation and distribution of suitable lessons for the elementary grades and for the high-school classes."

And so three books of 264 pages each were prepared and published; bound in manila paper of cadet gray, bearing on their covers the bull buffalo that is the crest of Secretary Lane's department, and procurable from the Superintendent of Documents, Government Printing Office, Washington, D.C., at 25 and 15 cents a copy.

The reporter was almost too alarmed to read even the table of contents of Series B, which is for "the first class of the high school and the upper grades

of the elementary school." But when he found that lesson B-1 dealt with "The Effect of War on Commerce in Nitrate" he took a chance. He felt his way on to lesson B-4, and had his fears brought back to new life—

"This means that the people of Chicago ate more than 444,000,000 eggs in a year. If all these eggs were laid end to end they would more than reach from the Canadian boundary to the Gulf of Mexico."

But there was worse to come in lesson B-7. The reporter, even though he is past the plastic age, began to understand Mr. Alexander's belief that "the ideas this book seeks to impart are socialistic." Listen:

"In many city homes in the tenement districts the children do not have enough food. For example, they have for breakfast a piece of bread and a cup of so-called coffee. That is neither enough nor is it of the right kind. The child would be much better without the coffee, and he ought to have some fat with the bread."

It did not seem possible that the lessons could go beyond that, but they do, in B-12, where it is bluntly declared:

"With the corporation matters are very different. The owners are very numerous; they may not even be acquainted with one another; they do not 'run the business' in any personal way.

"They elect a Board of Directors. The Board of Directors appoints a manager. The final result is that in some concerns there are a thousand or more owners scattered over several different countries who know little or nothing about the business, and some of them care little or nothing about it. They are interested mainly in the rate of dividends they receive."

And as to labor unions. Lesson B-29 concludes in this deplorable fashion:

"People differ very much in their opinion of labor organizations. Some think that these organizations serve no good purpose, and are indeed dangerous. Others think that they are very helpful, not only to the worker, but to the community at large. The truth is that there are good unions and bad unions, good union policies and bad union policies. Like most other institutions, they are good or bad according to the use which is made of them."

Like the scorpion, Series B of the lessons carries its sting in its tail. Lesson B-31, the last, pictures conditions in a factory where "employment management" is installed. The factory is represented as belonging to the Summit (note the insidious choice of a name) Manufacturing Company. One Mr. Seaton has taken employment there:

"Safety devices are provided to protect him against the rapidly moving belts and shafts. If he is injured, in spite of these precautions, or if he falls

ill, first-aid medical care is provided at the factory, and the factory physician and nurse follow him to his home.

"If he cannot work for a time, 'workmen's compensation' in case of accident or health insurance in case of sickness is paid him. If he has a grievance against his foreman or a fellow workman, or if he is dissatisfied with a rule or a tool, a shop committee on which the workers are represented will hear his complaint and adjust it fairly.

"All these are part of an enlightened labor policy which is now carried out by our more progressive factories and stores. Whether or not they are carried out under the direction of the employment department or by a medical department or by a so-called welfare department, they are all involved in employment management. For employment management means the development and wise utilization of the human resources of the plant."

This whole discussion furnishes a legitimate opportunity to call attention to the fact that the schools have been very deficient in times past in their treatment of social problems. One of the reasons why the schools have not ventured to enter this field is undoubtedly to be found in the attitude of conservatives like Mr. Alexander and the fear that teachers are under of offending boards of education and others of that type. The time has come when there ought to be a very clear and explicit assertion on the part of educational people that they will not be dominated by such criticism as is here presented. The schools of a democracy have a right to discuss democratic and popular matters. If the school people of this country are not aroused by this and other types of opposition to an assertion of their independence in educational matters, it is difficult to understand how they can claim in any large way to be leaders of public opinion even for the coming generation. The manufacturers' association has repeatedly made the effort to control and direct public education in this country. It has striven in many states and even through agencies set up by the federal government to divide the educational system into two separate parts. It has attempted to bring it about that a certain group

of children who are expected to spend their lives laboring in factories shall have a meager education very largely devoted to the cultivation of skill of hand. The agencies which have striven in this country to divide the school system supported their contentions for a long time by references to the German example of efficiency. Since that example has failed them so conspicuously, they are now resorting to methods exemplified by criticism of lessons on social affairs.

SCHOOL LIBRARIES

New England has an association of school librarians. At a recent meeting a number of papers were presented, all of which indicate the growth of the movement for the establishment of school libraries. Before reporting some of these papers it will be proper to call attention to the fact that schools are using in ever-increasing degree many different books in the preparation of lessons rather than the single textbook which has so long been traditional. Instead of reading a single book on history, pupils are being sent to the library to read from a number of different authorities and to compare the statements found in different books. In science the same practice is arising. English is no longer confined to a few classics, carefully dissected, but is aiming by laboratory methods and individual conferences to induce children to read widely in the literature of their own country and of other countries.

This change in the method of organizing classroom work implies a new type of equipment in public schools. That equipment consists in a library. The effective use of a library in turn depends upon the presence of a librarian who can sympathetically direct the interests of children and can give some instruction in the methods of finding material scattered through a number of different volumes.

Associations similar to that organized in New England ought to become common in all parts of the country, and

papers of the type reported for that association ought to become sufficiently common to impress teachers in all departments of the school. The following quotation from the report made by the secretary gives the details of the papers read at this meeting:

Miss Martha Carolina Pritchard, librarian of the Bridgewater Normal School, president of the Association, was second speaker. Her plea was for the school library especially as a factor in the Americanization of the foreign pupils in whose homes there is an utter absence of books. She also emphasized the need in normal schools of training the teachers to get at this, and of impressing upon them what the public libraries will do for them if they will do their part. She showed a plan worked out at Teachers College in New York, in a class during a summer session, for extending library instruction through the grades allotting definite phases of the subject to the grades capable of grasping them.

Her plea for familiarity with the world of books for children brought forth comments from Miss Newton of the Bridgewater Normal, Mr. Lowe, of the Massachusetts State Library Commission, and Mr. Thurber and Mr. Palmer, of the Newton Technical High, in which was emphasized the need that children be made to feel at home in a library, that the love of books be taught them, and that from the school man's point of view technical knowledge in a librarian counts less than love of books and power to lead—a great encouragement to the school struggling to organize libraries and as yet unable to afford a trained librarian.

The third speaker was the librarian herself, Miss Gladys Bigelow. She described the typical day in the library, detailing methods and picturing the library activities with a vividness that made her guests lookers-on during a school day rather than Saturday morning visitors.

The afternoon program offered two speakers. A third, Miss Griffin, of the Children's Museum of Boston (Jamaica Plains), made a welcome impromptu addition. She displayed French war posters and other material of war interest which are available as loans to any New England school defraying transportation expenses.

Mr. Henry Sanborn, librarian of the Bridgeport public libraries, who has recently returned from the Middle West, made a plea for proper legislation to provide state supervision and support for uniform school libraries, not merely in destitute districts, but in places where need is acute, though less apparent.

As supervisor of children's work in the Boston Public Library Miss Alice Jordan has excellent opportunity to judge the appeal of books, and in her informal summaries and selected readings from the new holiday editions gave a delightful insight, not only into the charms of the books, but into the tastes of boys and girls.

INDUSTRIAL CHEMISTRY

The *Literary Digest* contained in a recent number an interesting full-page editorial on the developments of industrial chemistry. The secondary schools of Europe, especially those of England, have devoted a good deal of attention to industrial chemistry. Indeed, the municipal institutions in general throughout England have been driven to courses that should be useful in a practical way in the textile and other related industries, and they have developed much more fully than our American institutions scientific courses for young men and women who are going into the industries.

The plea put forth by the *Literary Digest* for an enlargement of courses in industrial chemistry in our American high schools is vigorous and forceful. It is not possible here to quote the full page which is there given. Some extracts will, however, serve to indicate the tenor of the discussion.

Before the war chemistry was to the layman a dry, uninteresting subject, one to be avoided because he did not know enough about it to talk with any degree of certainty. In fact, was there anything to talk about? The transition from this feeling of indifference to one of intense interest took but a matter of a few months and has been one of the most remarkable developments since the war.

But why was America, with her tremendous natural resources, dependent upon any country for these products? Simply because there was no public interest. There was no incentive for the young blood of the country to train themselves for chemical pursuits. The capitalists did not understand the tremendous possibilities in the development of the American chemical industry. The government did not understand the economic value of America owning and controlling its own chemical industries. In short, the people in general did not realize the extent to which the economic fabric of the nation was dependent upon the chemist.

The entire country had a most rude awakening when it learned that its supply of potash, medicinals, optical glassware, porcelain, etc., was cut off. To say there was consternation would be to express it lightly. The general public began to understand that such industries as the textile, leather, and lithographic ink were solely dependent upon dyes, and that these industries supplied the very clothes and shoes they wore, and the books and periodicals they read.

Flaming editorials were written, Congress was swamped with bills of all kinds and descriptions, suggesting remedies, all attacking the slothfulness of the American chemist in ever permitting such a state of affairs to exist, and while the layman attacked the chemist, the sudden stoppage of dyes almost caused a panic in many trades, particularly the clothing trade. Many people were literally thrown out of employment over night, for what was the use of weaving cloth if there were no dyes? Even our cotton industry was thrown into jeopardy, for if there were no dyes what was the use of raising so much cotton?

The public interest, first created by imminent catastrophe, followed by the stimulation of the war for all things chemical, has changed the public viewpoint of chemistry from indifference to intense interest. But now that the war is won, will this interest continue to be manifested by the layman?

This is a question which should have the thought of every chemical man in the country. During the past four years our chemical industry has laid bare vast opportunities. It has merely scratched the surface. Its future depends upon hard, never-ceasing work, the expansion of the existing possibilities, and sympathetic public opinion.

This sympathetic public opinion which has been started by publicity in the editorial pages of newspapers and periodicals must be strengthened, must be sustained. But the general public is fickle and has changes of heart from one day to another. They have been reading so much about chemicals and the new chemical industry, that they are about to take it for granted, and then they are on the way to indifference. And the indifference of the public means the regression of the industry.

Advertising in the newspapers and periodicals of the country will play an important part.

To foster and increase sympathetic public opinion, to enlist the interest of capital, to protect new adventures, to widen the peace time market, the leaders of the American chemical industry will come out of the laboratory and out of the factory and talk to the thinking public in the magazines and newspapers of America.

NEW JERSEY HIGH-SCHOOL CONFERENCE

Conferences of high-school teachers and principals have frequently been held in the state universities of the Middle West. The practice originated in a conference called by President Harper at the University of Chicago, but it has spread so widely throughout the middle states that it is now an established institution in many of the states. The following account is given of a conference organized in the state of New Jersey patterned on the example of these western state conferences. The attendance at this conference was six hundred twenty-five. More than three hundred attended the dinner which was a part of the program. The conference was held at the State University at New Brunswick.

It began with a discussion of educational measurements under the direction of the department of education of the University, with Mr. Stewart A. Courtis as the speaker both Friday afternoon and Saturday morning. His talks were on "Problems of Measurement as Applied to Reading, Composition, and Spelling," and "Measurements as an Aid to Teaching." Both talks made a strong impression upon superintendents and principals. The conference on measurements is the second conference of this kind to be held by the education department of the State University.

The Commissioner of Education presided at the dinner given at the quarters of the Student Army Training Corps, and the affair proved to be one of the most enjoyable get-together phases of the conference. The after-dinner speakers were President Demarest, Dr. Henry Snyder, and Assistant Commissioner Meredith.

The evening session was in charge of the High School Teachers' Association, and the first address was by the Honorable P. W. Wilson, a member of the British Parliament, who spoke on "What the War Has Done Educationally." The

second speaker was Professor W. H. Schofield, of Harvard, secretary of the American Council of Education. His subject was "Education after the War."

On Saturday the following associations gave the regular programs as part of the general conference: New Jersey Mathematics Teachers' Association, the Association of Modern Language Teachers, High School Commercial Teachers' Association, the Association of Teachers of English, New Jersey Science Teachers' Association, Teachers of Classical Studies, Teachers of the Social Sciences, and Teachers of Public Speaking. At each of the meetings practical discussions were held bearing upon the question of method and content in the respective fields represented.

The feeling of the conference seemed to be that desirable modifications in purpose and subject-matter will need to be made in many of the high-school subjects because of new situations arising as the result of the war, and all indications point to the fact that the associations will become more active working groups than has hitherto been the case. It is a significant fact that many superintendents and supervising principals were in attendance, thus showing their interest in secondary education. The full program is not given here, as it is hoped that a volume of proceedings may later be published.

The plan of the conference was first presented by Assistant Commissioner Meredith in 1915 to the High School Principals' Round Table, and later presented to each of the associations for consideration. One or two tentative dates for the conference were set, but it was not until this year that plans could be perfected. In the meantime the Education Department of Rutgers College held its first conference for school administrators on educational measurements under the direction of Dr. C. H. Elliott. It was then planned to unite this group with the various associations dealing with secondary education,

and the facilities of the State University were offered. No new association was contemplated. The conference has simply afforded a means of temporary federation of existing associations.

It was the expressed desire of those in attendance that the conference be continued, and the prospects are good for an attendance of one thousand or more next year. Plans are now being made for next year's program, which will include problems of measurement, and the reorganization of the content of various high-school units will be undertaken. Attempts will also be made to interrelate various subjects, such as English and history, mathematics and science, etc. Much may be expected from this renewed interest in secondary-school problems.

Educational Writings

I. RECENT BOOKS FOR HOME ECONOMICS IN HIGH SCHOOLS

DEPARTMENT OF HOME ECONOMICS
University of Chicago

An unusual amount of governmental activity has influenced home economics literature since our review[1] of a year ago. On the strictly educational side both the Bureau of Education and the Federal Board for Vocational Education have brought out material, and for subject-matter the Food Administration publications have of course supplied large quantities of material, partly merely of transient interest, but some of permanent value.

A valuable series of brief "Home Economics Circulars"[2] has been coming out from the Bureau of Education. Among the most important of these is No. 2, *Current Problems in Home Economics*, which contains the summary of very interesting replies to a questionnaire sent to twenty-five home economics leaders. Among the questions asked were those in regard to duties and qualifications of supervisors, amount of school time needed for home economics, the sewing-machine and the commercial pattern, and the value of practice houses. Some of the replies make decidedly interesting reading, such as the varied list of qualifications desired for a supervisor, varying from physical fitness to scholarly attainment and knowledge of people. Also suggestive are the answers to "What should an eighth-grade girl know?"

Others of these circulars which should especially be mentioned are No. 3, *Home Economics Teaching in Small High Schools*, and No. 4, *Principles and Policies in Home Economics Education*.

The Smith-Hughes act has of course stimulated the writing of numerous articles and pamphlets. *The Second Annual Report of the Federal Board for Vocational Education*,[3] the most important of these pamphlets, should be

[1] *School Review*, XXVI (March, 1918), 215.

[2] Department of the Interior, Bureau of Education, "Home Economics Circulars," Nos. 1-7, 1917 and 1918.

[3] *Second Annual Report of the Federal Board for Vocational Education*. Washington: Government Printing Office, 1918. Pp. 172.

available to all teachers whose work is carried on through the use of Smith-Hughes funds or who are training young teachers for Smith-Hughes positions. It contains a clear-cut definition of home economics education as a form of vocational training in contradistinction to general home economics training. It gives a short history of home economics training as it has existed in this country up to date. The main part of the section is an interpretation of principles of home economics education as provided in the Smith-Hughes act. In this discussion all conditions and requirements of the act are clearly stated. This is followed by a short account of home economics work accomplished under the Smith-Hughes act in 1917–18.

Bulletin No. 26[1] of the National Society for Vocational Education also contains a section of especial interest to the teacher of home economics. An article by Mrs. Woolman on the preparation of teachers of home economics gives critical discussion of the purpose of the federal act in training teachers for home economics. Two articles on teacher training which follow serve to bring out definitely some of the important questions confronting the vocational economics teacher.

Many state boards have also brought out special Smith-Hughes bulletins. That for Illinois, *Statement of Plans and Policies*,[2] was published at Springfield last February.

Other important pedagogical literature includes "Home Economics Studies in Grades Seven to Twelve," a series of four extensive articles by Professors Cooley, Winchell, Spohr, and Miss Marshall in *Teachers College Record*.[3] Part I defines home economics and gives its aims and the basic ideas underlying organization. Part II is entitled "Home Economics Studies Based on the 8-4 Plan of Organization"; Part III, "Home Economics Studies Based on the 6-3-3 Plan of Organization"; and Part IV, "Standards by Which to Test Methods; Preparation of Teachers; Availability of Materials for Use in Secondary Schools."

"The aim of this series of articles is to show how household arts studies contribute most effectively to the purposes of the field of secondary education as represented in the statement of its various aims. Certain principles are established and illustrated, but it is not the purpose to offer detailed,

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[1] *Problems of Administering the Federal Act for Vocational Education.* National Society for Vocational Education Bulletin No. 26. New York City, 140 West 42d Street, May, 1918

[2] *Statement of Plans and Policies.* Bulletin No. 1, Board for Vocational Education, State of Illinois, Springfield, 1918.

[3] *Teachers College Record*, XIX (March, May, September, 1918), 119–30, 229–58, 369–89.

stereotyped outlines, but rather to allow for *flexibility* based on the principles established. This should stimulate initiative on the part of teachers and principals and lead to experimentation and testing of various methods in this field of education."

TEXTBOOKS AND REFERENCE BOOKS ON FOOD

DOWD, MARY T., and JAMESON, JEAN D. *Food and Its Preparation.* New York: John Wiley & Sons, Inc., 1918. Pp. 167.

This text, designed for use in high-school cooking classes, will meet the needs of the many home economics teachers who prefer, themselves, to divide their material into lessons and to use their own recipes. The book contains chiefly text material, with a few experiments and suggestions for laboratory work at the ends of the chapters. The main emphasis is on the composition and preparation of food, with two chapters on food requirements and meal-planning.

It would seem that more information is given than could possibly be made vital to a high-school class in the time usually allotted to such courses; but it is so well organized, with pertinent paragraph headings, that the teacher who uses it will find it easy to select the parts adapted to her group. On the whole, the book is a distinct contribution to the field of high-school texts.

STEWART, FRANCES ELIZABETH. *Lessons in Cookery.* Book One, *Food Economy.* New York and Chicago: Rand McNally & Co., 1918. Pp. vi+250.

The author states in her preface that this is the first of a series of four books designed primarily for the high-school student of home economics, and that the aim is to "avoid text material and give the subject-matter in the form of laboratory problems." The organization of the book is in accordance with this statement, inasmuch as it is chiefly recipes with suggestions for varying them and many miscellaneous suggestions in regard to their preparation. It hardly gives the clear idea of the principles of food preparation which is desirable in a text for a beginning class in cooking.

Many types of dishes, such as croquettes, escalloped dishes, stews, hashes, sandwiches, are grouped under the heading "complete dishes" on the basis that they contain starch, protein, and fat. This might give the pupil an inaccurate idea of their dietetic value, as no mention is made of the fact that they must be supplemented with mineral foods.

A very good feature of the book is the fact that it is also published in the form of a loose-leaf "filler" for class use. This saves much copying on the

part of the pupils, as the data which they collect can be put directly into their books and the recipes removed for class use. This and the Josserand book reviewed below are the first suggestions which have been so far made that home economics classes might profitably use the loose-leaf books which have "already proved their value in science laboratories."

JOSSERAND, BETH WARNER. *Food Preparation.* A Laboratory Guide and and Note-Book for High School Classes in Domestic Science. Peoria, Ill.: Manual Arts Press. Revised Edition, 1917. Part I, pp. 147; Part II, pp. 142.

This laboratory guide and loose-leaf notebook is published in two volumes for the sake of convenience. It is designed for the use of high-school cooking classes, and is a distinct step in advance so far as economical use of the student's time is concerned. All data as well as answers to questions can be filled in directly, and much copying avoided. The chief disadvantage in using such a book would probably be the fact that very little leeway is allowed in organizing the subject-matter and in placing the desired emphasis. Many teachers prefer to work out their own laboratory outlines rather than to try to adapt a printed set.

The topics included are the same as those found in any textbook of cooking. The form of the material is the new feature.

CRUESS, WILLIAM V. *Home and Farm Food Preservation.* New York: Macmillan, 1918. Pp. xxiv+276. $1.50.

The subject of food preservation is here considered both theoretically and practically. There is a good discussion of why foods spoil and a general study of the principles underlying food preservation. Particular methods with the possible uses of each are also considered at some length. The last section of the book is devoted to recipes, some of which are of the well-known type while others are more rare. Among the latter are recipes for pickling olives, for preparing and clarifying fruit juices and syrups, and for candying fruits.

The comprehensive bibliography adds much to the usefulness of the book for reference.

ANDREA, A. Louise. *Home Canning, Drying and Preserving.* New York: Doubleday, Page & Co., 1918. Pp. xv+150.

This book gives directions for canning all kinds of foods by the one-period cold-pack method. It also contains recipes for making various kinds of preserves, jellies, butters, pickles, and fruit beverages, and has chapters on salting and drying. The book can hardly be considered necessary as a

school reference, since the material it contains has already been covered by government bulletins.[1]

SHERMAN, HENRY C. *Chemistry of Food and Nutrition.* New York: Macmillan, Second Edition, 1918. Pp. xiii+454.

The second edition of this book is even more valuable than the first. Large parts have been rewritten and much new material added. Especially interesting are the new chapters, "Antiscorbutic and Antineuritic Properties of Food," "Food in Relation to Growth," and the partly new chapter "Dietary Standards and the Economic Use of Food." The latter gives and discusses the results of Sherman and Gillett's[2] important dietary study made for the New York Association for Improving the Condition of the Poor. It is especially this study and two others somewhat like it that help the teacher to know with considerable accuracy what is wrong with the dietary habits of many of our people and so to teach with a conviction which she has sometimes lacked. It strengthens her efforts to present the value of milk and vegetables when she knows from quantitative studies how much large sections of our city populations need the teaching and how close to the borderline of safety the lack of these foods brings the calcium and iron of the diet.

JORDAN, EDWIN OAKES. *Food Poisoning.* Chicago: The University of Chicago Press, 1918. Pp. vii+115. $1.00.

The whole subject of food poisoning is summarized by Dr. Jordan in a non-technical manner in this little volume. It thus furnishes a valuable reference book, since it gives, in compact form, material which is usually found widely scattered.

PARKER, HORATIO NEWTON. *City Milk Supply.* New York: McGraw-Hill Book Co., Inc. Pp. 486. $4.50.

The author of this volume has been both a health officer and a teacher, and he has produced, as might be hoped from such a combination, a scientific

[1] O. H. BENSON, *Home Canning by the One-Period Cold-Pack Method as Taught to Canning Club Members in the Northern and Western States,* U. S. Department of Agriculture, Farmers' Bulletin 839. Other recent publications on this subject are: *Drying Fruits and Vegetables in the Home,* U. S. Department of Agriculture, Farmers' Bulletin 841; M. E. CRESWELL and O. POWELL, *Home Canning of Fruits and Vegetables as Taught to Canning Club Members in the Southern States,* U. S. Department of Agriculture, Farmers' Bulletin 853; A. L. ROUND and H. L. LANG, *Preservation of Vegetables by Fermentation and Salting,* U. S. Department of Agriculture, Farmers' Bulletin 881.

[2] See also the full report: H. C. SHERMAN and L. GILLETT, *The Adequacy and Economy of Some City Dietaries,* New York: A.I.C.P., 1917. Two other recent and important studies of food consumption among the very poor are *Food Supply in Families of Limited Means,* by M. M. Davis, published by the League for Preventive Work, Boston; and "Cost of Living in the District of Columbia," published in the *Monthly Review,* United States Bureau of Labor Statistics, Nos. 4, 5, 6, 1917. These are all three discussed also in *Food and the War,* United States Food Administration (see review below).

and very readable book dealing with practically every important phase of the milk question. It is a straightforward statement of facts concerning the production, composition, transportation, sanitation, and control of milk. The material is well organized, and the frequent headings in black type make it well suited to be a ready-reference book on milk.

MacNutt, J. Scott. *The Modern Milk Problem.* New York: Macmillan, 1917. Pp. xi+258.

The milk problem with which this book deals is that of supplying the public with a safe clean milk. The author has, therefore, confined his material rather closely to the sanitary phase of the milk question. Milk as a vehicle of disease is considered, with special attention to sources of contamination. The methods of producing and handling clean milk are discussed; and laboratory tests, methods of pasteurization, and standards of grading are included. Finally a plan for the solution of this milk problem is offered in the last chapter.

Broadhurst, Jean. *Home and Community Hygiene.* Philadelphia: J. B. Lippincott Co., 1918. Pp. xiii+428.

A satisfactory review giving the nature and purpose of this volume of "Lippincott's Home Manuals" is given in the introduction, which is written by C. E. A. Winslow, professor of public health, Yale School of Medicine. "A textbook which covered the whole field of disease prevention and health conservation in an elementary but authoritative way has, however, been much needed. This need Professor Broadhurst has met in the present volume.

"The subject has been approached throughout from the practical standpoint of the homemaker. Problems of engineering and health administration are touched upon lightly, but sufficiently for the uses of the average citizen; while those applications which are of immediate moment in the household are dwelt upon in helpful detail. The book will, therefore, be of special value to the student of household administration and to the student of nursing, who must be expert in his art. In addition to filling the need of a textbook in schools of home economics and nursing, it should have a wide appeal to the general reader who desires familiarity with the principles which govern the management of the living machine and its protection against harmful environmental conditions."

FINCH, V. C., and BAKER, O. E. *Geography of the World's Agricultue.* United States Department of Agriculture: Government Printing Office, 1917. Pp. 149.

This atlas is a remarkable collection of maps showing where the world's chief food supply is grown—the distribution of sugar beets and sugar cane, for instance, in different parts of the world; of wheat and other cereals; of cattle, swine, etc. Each group of maps is preceded by a short discussion of the world's production of the foods under consideration, and all maps are accompanied by statistical charts. The book is an invaluable collection of material, and especially important to teachers now that the war has broadened our interest in food supply as a world problem instead of a local or individual one.

KING, CAROLINE B. *Caroline King's Cook Book.* Boston: Little, Brown & Co., 1918. Pp. xvii+275. $1.50.

Miss King's method of presentation is excellent and unusual, particularly when she deals with flour mixtures, soups, sauces, salads, icings, and omelets. For each group she has worked out a few basic recipes. These she has elaborated to give a great variety of dishes.

Unfortunately the usefulness of this book for reference is impaired by some erroneous statements that the author has allowed to creep into her theoretical consideration, such, for example, as "salt added to those vegetables which ripen under the surface of the soil, will cause the minerals to escape and make the vegetables tough."

EAST, ANNE MERRITT. *Kitchenette Cookery.* Boston: Little, Brown & Co., 1918. Pp. ix+112. $1.00.

Kitchenette Cookery is a simple manual for the apartment-dweller preparing food on the very small scale. Its cheerful confidence makes it a pleasant reference both for teacher and for pupil.

CUNIBERTI, JULIA L. *Practical Italian Recipes for American Kitchens.* Washington, D.C.: Julia L. Cuniberti, 2405 First St. N. W., 1918. Pp. 32. $0.50.

This little book contains unusual and interesting recipes for soups, meat substitutes, and dishes made from left-over meats. Because these recipes are economical they should be of value to all teachers of food work, and because they are Italian they should be of particular value to those in charge of food work in Italian districts.

GREENBAUM, FLORENCE K. *The International Jewish Cook Book.* New York: Bloch Publishing Co., 1918. Pp. xii+419. $1.50.

Those who are teaching food work in Jewish neighborhoods will find Miss Greenbaum's book very convenient. It contains sixteen hundred recipes which conform to the religious and dietary laws of the Jewish people and gives a set of rules for koshering meat.

WAR BOOKS ON FOOD

Publications on food which the war has brought forth contain much material of permanent value. It is to be hoped that the vivid and important writing of some of these books and pamphlets will not be lost because associated with it is instruction on the use of wheat substitutes and how to win the war by food-saving.

Among the more useful of those may be mentioned: *The Day's Food in War or Peace.*[1] Some of this pamphlet is of transient interest, but the greater part of it is of as great value today as during the wheat shortage. It is made up of brief chapters by some of the greatest nutrition experts in the country, giving in simple terms what each one should know generally about his subject. Lusk contributes the section on "Food for a Day"; McCollum, "Conservation of Fat and Sugar"; Langworthy, "Meat and Meat Substitutes"; Mendel, "Milk and Its Products"; Caroline L. Hunt, "How to Use Fruits and Vegetables"; Ruth Wheeler, "The Children's Food." The pamphlet, though planned originally for women's clubs, is of value for school reading.

Three books[2] for colleges and schools have been prepared under the direction of the United States Food Administration. It is a very remarkable commentary on the stress which the Food Administration laid on general education work in schools and colleges that all three of these books contain not only, or not even chiefly, propaganda in the usual sense of instruction in the food shortage and the need of food conservation. They emphasize even more the wise choice of food from the nutritional and economic standpoint. It is this fact that will give them value for some time to come.

The first of these books was the course for colleges, *Food and the War*, a revision of the lessons sent out week by week during the second semester of

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[1] U. S. Food Administration; U. S. Department of Agriculture; Woman's Committee, Council of National Defense, 1918. Pp. 108.

[2] U. S. Food Administration with the co-operation of the Department of Agriculture and the Bureau of Education, *Food and the War* (Boston: Houghton Mifflin Co., 1918. Pp. 279. $0.80); *Food Guide for War Service at Home* (New York: Scribner, 1918. Pp. 62. $0.25). *Food Saving and Sharing* (New York: Doubleday, Page & Co., 1918 Pp. 102. $0.24).

last year. It contains material suitable for a survey course in food in colleges or useful for reference in high schools.

The book planned to be used in high schools, *Food Guide for War Service at Home*, is probably more transient in its interest, though it, too, has chapters on protein-rich foods, milk, and vegetables that give teachable nutrition material.

The latest of these three books, *Food Saving and Sharing*, "for the older children," was published after the armistice. It was written by Eva March Tappan, Alice P. Norton, and others. The first half of it, delightfully written, is on "What Kinds of Food Ought One to Eat?"—a teachable and interesting presentation of Langworthy's five food groups, giving material that we wish every child to know. The five booths to which the child goes marketing for his food recall the Chicago Patriotic Food Show of a year ago. "Milk is useful in so many ways that it might almost be put in every booth." The latter half of this book is more distinctly food-saving—plans for the future and a survey of the past months. Chapter headings are "Hungry Europe," "What We Did about It," "What We Have Yet to Do." This part is less simply and attractively written, but contains much of importance.

CLOTHING AND HOUSEHOLD ART

RHOE, MARY JANE. *The Dress You Wear and How to Make It.* New York: Putman, 1918. Pp. xiv+173. $1.50.

This book was written for use in evening and vocational schools. It contains a certain amount of accurate, reliable information which has been organized in no logical sequence whatever. A fair example of the lack of relation between points discussed is the following collection of headings in one chapter: "Combining Colors," "Putting Canvas in Front of Coat," "Miscellaneous," "About Basting," "About Cleaning Black Silk." Each chapter is followed by questions. The form of these questions shows the writer to be unfamiliar with the pedagogical principles governing questioning. An outline for lessons covering a period of nine months is included. These lessons consist chiefly of directions for making samplers and verbal descriptions of methods of making stitches. Here again the writer shows lack of familiarity with most recently approved principles of teaching sewing.

TURNER, ANNABEL H. *Sewing and Textiles.* New York: D. Appleton & Co., 1918. $1.75. $1.88 by mail.

This book is intended for use by the teacher who has had little training or experience. It is also meant as a textbook in grade schools or rural high

schools. The purpose has been accomplished with a considerable degree of success. The material covers a wide range, but is organized in a logical and compact fashion. It is written in such a way as to be comprehended by the grammar-grade child.

It includes directions for stitches and constructive processes. The directions are clear, although some of the accompanying illustrations are confusing. Suggestions for problems permitting the application of the stitches and constructive principles are also included. In the discussion of textiles equal emphasis is placed on the early history of the textile industry, textile manufacture, and methods of testing for adulteration. Important, well-taken points are discussed in chapters on the use of the sewing-machine, laundry problems, and the hygiene and appropriateness of clothing.

TRAPHAGEN, ETHEL. *Costume Design and Illustration.* New York: John Wiley & Sons, Inc., 1918. Pp. ix+145. $2.50.

As the preface indicates, the book is suited to "vocational and industrial schools," and its instruction is for professional costume illustrators and designers. However, chapter iv, on "Color," should prove very helpful as reference material for either high-school pupils or their instructors, since it states very definitely the generally accepted color theory and rules for color harmonies. Likewise chapter v, on "Design," contains useful suggestions for the clothing of stout and slender types, and a clear discussion of hats.

PICKEN, MARY BROOKS. *The Secrets of Distinctive Dress.* Scranton, Pa.: International Textbook Press. Pp. vii+221. $2.00.

This book is not organized as a textbook, but will be welcomed in the teacher's library and will serve a good purpose on the reference shelf for both high-school and college pupils. Its popular form should make it readable and enjoyable as well as instructive for the average woman out of school.

In its 230 pages the book fulfils the expressed purpose of the author to "help you to see in dress beauty that you have not been able to see before" and "to give instruction in the whys and wherefores of individually becoming dress." The chapter on "Appropriate Dress" deserves special mention because of the thoroughness of the discussion, the wealth of examples given, and the very helpful tables which suggest proper costumes for typical purposes through the various seasons.

KISSELL, MARY LOIS. *Yarn and Cloth Making*. New York: Macmillan, 1918. Pp. xxvii+252. $1.60.

This book is intended as a textbook for use in colleges and normal schools, but it is sufficiently flexible in arrangement to be useful for reference in secondary schools. The book is divided into two parts, "Yarn Making" and "Cloth Making," each of which discusses the various types of processes with considerable mechanical detail and many interesting illustrations. The economic gains in passing from methods of ancient times to those of today are also considered. The author discourages "exclusive fabric study," and instead of starting with a study of the finished product she approaches textiles and finished garments through a historical discussion of textile manufacture.

WEINBERG, LOUIS. *Color in Everyday Life*. New York: Morris Yard & Co., 1918. $2.50.

This book is a valuable reference book to the household arts teacher; first, because of its unusually clear statement of color theory and color principles; secondly, because of its original interpretation of the theory and principles; thirdly, because of its suggestive application of them to dress, and to household furnishing as well as to many phases of vocational work. In the first chapter in the book Mr. Weinberg gives some of the main uses of color in everyday life in such a way as to show the need of some technical knowledge of color and to arouse interest in this type of knowledge. In chapters ii, iii, and iv he follows with a very interesting informal presentation of the main points of color theory and principles under the heads of a "Discussion of the Physiological Effects of Color," "Choosing a Color Combination," and "The Art of Color Arrangement." With this background chapter iv discusses "Color in Dress"; chapter v, "Color in the Home"; chapter vi, "Color in Business." All of this material is practical, interestingly stated, and accompanied by suggestive diagrams and illustrations. After this follows a fuller discussion of the theory of color in which the main physical facts relating to color are thoroughly stated. The plan of following application of color to home, costume, and other phases of work by more scientific material seems particularly clever because through these chapters on application interest has been aroused in color for its own sake, and the reader is eager to go deeper into the science of it. The chapters following are quite as valuable and interesting and deal with color harmony as such and with several types of color schemes. This is one of the few books that really tells

how to use color in a way that anybody can understand. This clarity and definiteness are its most valuable qualities.

ROLFE, AMY L. *Interior Decoration for the Small Home.* New York: Macmillan, 1918. Pp. xx+151. $1.25.

This is probably the best high-school text of its kind—first, because it covers its field quite completely, and, secondly, because the space allotted to the various topics is well balanced. The discussions are so brief that supplementary reading is desirable, and to meet this need the author lists at the end of each chapter the books to be consulted, with definite assignments to topics, chapters, and pages.

BOOKS ON HOUSEHOLD BUSINESS

TABER, C. W. *The Business of the Household.* Philadelphia: J. B. Lippincott Co., 1918. Pp. xii+438.

The Business of the Household presents a rather detailed treatment of the household budget and other financial and business matters involved in running a home. The home economics teacher will find in this book much valuable and accurate information which she has often wished for and which has never before been put into convenient form. The discussion of sound financial principles upon which to build a home and of the financial relation between husband and wife is presented from a wholesome point of view in a vigorous and effective manner. Other topics treated in the first part of the book are the use of a bank account, methods of keeping household accounts, and the basis for apportioning the income through a family budget. The section on the function of credit in household finance contains an interesting treatment of the "pay-cash" idea.

The following chapter headings give an idea of the scope of Parts II and III, "Factors in the Family Budget": "Rent," "Fuel," "Taxes," "Insurance," "Food and Marketing," "Clothing," "The Household Working Equipment," "Service," "Savings and Methods in Saving," "Cultural Wants in the Family Budget." In Part IV is presented the legal and business status of the family, including such topics as laws which affect the family and real estate titles and transactions. The topics are developed in a thorough manner with the exception of food and clothing. This is of course due to the fact that these subjects are treated more fully in other courses in home economics, whereas such subjects as electric light and power, gas, taxes, and insurance are not likely to be discussed in other connections.

Although the book is not adapted for use as a high-school text, it could be used very profitably as a reference book to which the students might go for information along the lines mentioned above.

CRANDELL, J. CHESTER, and CRANDELL, MERCY FRYE. *A Manual of Household Accounts.* Boston: Whitcomb & Barrows, 1917. Pp. 24+ unpaged account book.

Unlike other household account books on the market, this one emphasizes the methods used in business bookkeeping, especially in regard to the records of all income and expenditures, whether in the form of cash, credit, or changing values. Although rather difficult for the high-school student, to the teacher of household accounting it is suggestive.

LEEDS, JOHN B. *The Household Budget.* Philadelphia: John B. Leeds, 1917. Pp. 246.

The aim of the author is to show that the activities of the housewife are "essentially productive." To this end he has collected, by means of a questionnaire, information regarding the amount and kind of work done by housewives. Various methods of evaluating women's household work are considered, with the conclusion that the best method is the same as that used for any other worker—what she would have to pay to obtain someone else to do the same work, or what she could obtain if she hired out to someone else as an employee. A revised household budget is worked out on the basis of the total income including the estimated value of the housewife's services. The percentage of the income spent on each item shows not only the actual money which that phase of homemaking demands, but also the time of the housewife estimated in money.

The latter part of the book is given over to a survey of the writings of economists on the subject of the economic value of women's work.

The Household Budget is the first book to develop the point of view of the "economic value" of women's work to any great degree. Today when the subject of the value of women's work in industry is receiving so much attention, this contribution should be especially interesting to every home economics teacher who wishes to keep in touch with the trend of the times.

HUGHES, DORA MORRELL. *Thrift in the Household.* Boston: Lothrop, Lee & Shepard Co., 1918. Pp. 288.

The home economics teacher who is on the alert for concrete suggestions for practicing thrift will find it worth her time to go through this book. It

represents the practical experience of a housekeeper and is very suggestive although rather rambling in its organization and somewhat inaccurate in places (p. 157, "Dietists claim a wholesomeness for the vegetable oils that is lacking to animal oils.")

WELLMAN, MABEL T. *Economy in Food.* Boston: Little, Brown & Co., 1918. Pp. 36.

Unlike many books on "economical" food, this one is true to its title and lays emphasis wholly on economical methods of buying and storing food and of planning meals. A few recipes using typical cheap foods and a table showing relative costs of 100-calorie portions are included. On the whole it is an excellent response to the need of the times. The organization is good, with clear paragraph headings which make it especially adapted to use in high schools. The book contains only 35 pages and might be considered a supplement to the high-school text *Food Study* by the same author.

KEENE, E. S. *Mechanics of the Household.* New York: McGraw-Hill Book Co., Inc., 1918. Pp. x+391.

The author treats the various mechanisms of the household in an interesting and unique manner. The subject-matter includes the various kinds of heating plants, their management, special advantages of each kind, plumbing, water supply, humidity and ventilation, various kinds of fuels, electricity and its application to household use.

The subjects are treated scientifically without being too technical for the average person. The treatment of heating systems, together with that of humidity and ventilation, is especially thorough and clear. The book merits the careful consideration of the teachers of house planning and of household physics, and of intelligent housekeepers who desire greater efficiency and economy in management of household mechanisms.

BALDERSTON, L. RAY. *Housewifery.* Lippincott's Home Manuals. Philadelphia: J. B. Lippincott, 1918. Pp. 353. $2.00.

All home economics teachers who have taught housewifery know how extremely difficult it is to find authoritative and up-to-date material along this line. To them Miss Balderston's book will be most welcome. The full bibliographies at the end of each chapter should also be helpful.

The greater part of the volume is given over to the subjects usually associated with the term housewifery, such as working equipment, labor-

saving appliances, methods of cleaning and renovating, disinfectants, fumigants, and household pests. The chapter on storage of all kinds from vegetables to sporting goods shows keen appreciation of this very important problem of the housewife. It would seem that some of the material included under household furnishing belongs more directly in a book on house planning and furnishing.

II. BOOK NOTES AND REVIEWS[1]

A discussion of liberal and vocational studies in the colleges.[2]—The discussion as to the relation of liberal and vocational studies has been for some time a bitter partisan controversy. The ultra-protagonists of the liberal studies would eliminate all vocational studies, while those of the latter would have nothing to do with the liberal studies; in fact, the radicals have seen no relation of the two types of studies in a program of higher education.

A recent paper should do much to lessen the ambiguity, confusion, and partisanship which have so often characterized discussion of the subject. In this paper Professor Stuart holds no brief for either type of study to the exclusion of the other. He states his thesis as follows: "Our present age being one of social idealism and of increasing application of the resources of nature to human ends, it is essential that our ideal of education and of personal culture should embody, in close and well-balanced co-operation, the liberal and the vocational elements." Vocational studies, he says, supply a knowledge of or about the means and machinery of life, and the liberal studies supply a direct and immediate acquaintance with the characteristic interests and experiences of life. Both, he states, are necessary. This paper is especially recommended to the partisans of the vocational or liberal studies.

A series of commencement orations and baccalaureate sermons.[3]—The titles of twelve discourses of general and educational interest are: "Faith, Hope and Charity"; "Vocations and Avocations"; "Why Is a Seminary?"; "The Institutional Church"; "The Chemistry of Souls"; "Privilege of the Strong"; "Opening the Book"; "Sincere without Offense"; "Following in His Steps"; "The Unmaking of a Man." These twelve commencement

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[1] The first four of the following reviews were written by W. G. Reeder, Fellow in Education, University of Chicago. The remaining ones were prepared by the editor of this department.

[2] HENRY WALDGRAVE STUART, *Liberal and Vocational Studies in the College.* Stanford University, California: Published by the University. Pp. 72. $0.75.

[3] DAVID M. STEELE, *Addresses and Sermons to Students.* New York City: Putman. Pp. ix+257. $1.50.

addresses, orations, and sermons have been arranged, according to the author, to typify a dozen coteries of students; among young men, medical, theological, and university graduates; and young women, both of boarding-school and college age.

The usual book of addresses is not read because it is not interesting. But Dr. Steele's volume is an exception; it is intensely interesting. Every discourse has a message and is presented in attractive style.

There is a common philosophy in all the discourses: it is the demand for contact with realities in education. Dr. Steele has no patience with an education the chief purpose of which is to train the memory. The important thing, he says, is to deal with things rather than with the symbols of things. The book should be of interest to the lay as well as the professional group.

Two annual reports of a superintendent of schools.[1]—What should go into the report of the superintendent of schools? One answer to this question is: The content of such reports should be determined by the interpretability and use of the data presented. These data should be selected and presented in a way that will contribute to an improvement of school practice. It must be frankly said that few of our superintendents' reports contribute much to the realization of such an objective.

The two latest annual reports of one of our largest and most progressive school systems follow the plan of the traditional report. Such a report is a composite volume introduced by a statement from the superintendent of schools, followed by general descriptive reports from the officers of the various departments. These statements are followed by a large body of statistical data, usually uninterpreted, and therefore, on the whole, unintelligible to the public.

A considerable portion of the Detroit reports is taken from the secretary's financial statement of the receipts and disbursements for each fiscal year. One is surprised to find that the smallest of the financial items are published—those as small as $1.00. Such a financial statement in all probability could better have been condensed and published as "unit" costs.

Three recent bulletins of the United States Bureau of Education.—The Commission on the Reorganization of Secondary Education has outlined those fundamental principles which appear to it to be most helpful in directing secondary education. This is one of the most authoritative statements of

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[1] *Seventy-fourth and Seventy-fifth Annual Reports of the Board of Education of the City of Detroit.* Pp. 245.

these principles which has appeared; its influence on the organization and administration of the various subjects is bound to be colossal.

It outlines, among other topics, the need for reorganization; the goal of education in a democracy; and the main objectives of education. The last-mentioned section is the backbone of the discussion, and is generally in agreement with the objectives stated by such men as Dewey and Bobbitt. The Commission regards the following as the main objectives of education: health, command of fundamental processes, worthy home-membership, vocation, citizenship, worthy use of leisure, and ethical character.

The bulletin is recommended to school people in general, and particularly to the administrative officers and teachers in secondary schools.[1]

The modern mode of approach to the organization and administration of a scheme of industrial education is through the industrial survey. The reader is no doubt already familiar with the reports of such well-known surveys as those of Minneapolis, Richmond, Virginia, and Indiana (comprising the Indianapolis, Evansville, Richmond, and Jefferson County surveys). Now we have a similar survey for Wilmington, Delaware. The report of this survey should be of particular interest to those who are immediately concerned with the organization and administration of industrial education. Superintendents, vocational advisers, and industrial arts supervisors will find in the report a suggestive technique by which they may survey their communities as a preliminary step to introducing or modifying a scheme of industrial education.[2]

Research in the field of rural education has been very meager. Studies in the field of urban education are constantly appearing, but they are infrequent in rural education. One of the most recent contributions to the latter field has just appeared. It shows the various ways in which the state normal schools of the nation are helping to prepare teachers for the rural schools. Professor Burnham's recent study will afford many suggestions to those most immediately concerned with the work of normal schools.[3]

Americanizing non-English residents.—The Americanization movement has made wonderful progress during the past two years. One handicap the workers in the field have felt is the insufficient supply of suitable material in

[1] *Cardinal Principles of Secondary Education* Bulletin, 1918, No. 35. Washington, D.C.: Government Printing Office. Pp. 32. $0.50.

[2] *Industrial Education in Wilmington, Delaware.* Bulletin, 1918, No. 25. Washington, D.C.: Government Printing Office. Pp. 102. $0.15.

[3] *Rural-Teacher Preparation in State Normal Schools.* Bulletin, 1918, No. 27. Washington, D.C.: Government Printing Office. Pp. 77. $0.10.

the form of textbooks. Realizing this drawback to effective adult education, publishers and specialists have set about to remedy the situation. An addition to the small supply of suitable texts to use in adult classes is a little book by Henry H. Goldberger,[1] principal of Public School 18, New York City, and instructor in methods of teaching English to foreigners, Columbia University.

After ten pages of introductory material on "Principles of Method" in which the author tells how to use his book and discusses such matters as phonics, writing, reading, conversation, number work, and the like, the material for the first lesson, entitled "In School," is presented along with some directions relative to teaching it. A similar scheme is followed in connection with each lesson, one hundred eleven in all. Throughout the book topics are used which are closely related to the daily life of the reader. To add to this concreteness a copious sprinkling of well-selected illustrations is scattered throughout the book.

Two recent books in social science including history.—Some of the high-school teachers in the state of California are making important contributions to the solution of the problems relative to the teaching of the social sciences in secondary schools. R. L. Ashley, of the Pasadena High School, and Anna Stewart, of Los Angeles, are two teachers of this state who have recently made contributions in the form of a text in modern European history[2] and outlines and references for a course in social problems.[3]

Modern European Civilization is the culmination of nine years of work by its author on the problem of the reorganization of the high-school course in social studies including history. *The New Civics*, *Early European Civilization*, and *American History* are other contributions to the solution of this problem by Mr. Ashley. The volume deals with Europe during the three centuries since 1648. It aims to emphasize great movements rather than minor historical changes, social and economic conditions, and those changes most closely related to present-day Europe. Inasmuch as the general make-up of this book is similar in every respect to *Early European Civilization*, which is rather well known by high-school history teachers, it seems unnecessary to speak of these phases here.

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[1] *English for Coming Citizens.* New York: Scribner, 1918. Pp. xx+236.

[2] R. L. Ashley, *Modern European Civilization.* New York: Macmillan, 1918. Pp. xxii+710. $1.80.

[3] Anna Stewart, *Social Problems: Outlines and References.* Boston: Allyn & Bacon, 1917. Pp. vi+229. $0.75.

In her *Social Problems: Outlines and References* Miss Stewart has made a valuable contribution to the literature on the social studies in high schools. As suggested by the subtitle, the book consists of two parts, one devoted to outlines and one to references. The first consists of rather elaborate outlines, accompanied by specific references, of twelve topics, as follows: adjustment, ego or socius, adjusting man, education and child labor, wages and standards, city maladjustments, woman and economics, family-social virtues, conservation of labor, labor and business, society and business, and socialism. Part II is made up of references on a large number of topics in the field of social science arranged alphabetically. This phase of the work should be of inestimable value to one engaged in teaching a course such as the one Miss Stewart outlines in the first part of her book.

A new book for social workers.—Social workers will find much of interest and value in a recent publication in their field.[1] The title of the work is very appropriate, since so much of the material is of a historical character. For example, there are three chapters on the family historically treated. These are entitled: "The Primitive Family," "The Medieval Family," and "The Renaissance and Reformation Family." Other closely related subjects are "Birth Control" and "Sterilization, Sex-Instruction, and Eugenics." On these subjects the author's views are safe, conservative, and constructive. The three chapters on the historical treatment of the family would make excellent supplementary reading for a course in social problems such as the one outlined by Miss Stewart in her book of which mention has been made above.

A book with an attractive title.[2]—There is much said nowadays concerning making the school an integral part of the life of the community. From its title the book under review here would seem to offer valuable contributions along this line. On a careful examination of its contents, however, one is forced to conclude that the book is simply another one rather than a new one in the field. It treats of such subjects as school government, school punishments, conducting a recitation, teaching arithmetic, history, grammar, geography, hygiene, literature, composition, nature-study, agriculture, home science, and the like. While the book contains many concrete and helpful suggestions relative to the teaching of these subjects, there is in reality little

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[1] E. J. Menge, *Backgrounds for Social Workers.* Boston: Richard G. Badger, The Gorman Press, 1918. Pp. 214.

[2] Inez N. McFee, *The Teacher, the School, and the Community.* New York: American Book Co., 1918. Pp. 256.

in it that has not been said over and over again during the past three decades or so. The style and treatment throughout the work are thoroughly adapted to inexperienced and untrained teachers. If it were needed, the author could find a justification for her book in this fact.

III. CURRENT PUBLICATIONS RECEIVED DURING THE PAST MONTH

A. GENERAL EDUCATIONAL METHOD, HISTORY, THEORY, AND PRACTICE

Annual Reports of the Board of Education of the City of Detroit. Detroit, 1917, 1918. Pp. 245.

HANMER, LEE F. *Physical Training and Play. The Gary Public Schools.* Paper. New York: General Education Board, 1918. Pp. xix+35.

MCFEE, INEZ N. *The Teacher, the School, and the Community.* New York: American Book Co., 1918. Pp. 256.

MONROE, WALTER SCOTT. *Measuring the Results of Teaching.* Cambridge: Riverside Press, 1918. Pp. xviii+297.

Organization and Administration of Intermediate Schools in Boston. Bulletin No. XVII of the Department of Educational Investigation and Measurement. Boston: City of Boston Printing Department, September, 1918. Pp. 75.

B. BOOKS PRIMARILY FOR ELEMENTARY-GRADE TEACHERS AND PUPILS

BAILEY, CAROLYN SHERWIN. *What to Do for Uncle Sam.* Chicago: A. Flanagan Co., 1918. Pp. 220. $0.75.

BRYANT, SARA CONE. *I Am an American.* Boston: Houghton Mifflin Co., 1918. Pp. 159. $0.60.

LASELLE, MARY A. *The Home and Country Readers.* Book Four. Boston: Little, Brown & Co., 1918. Pp. 336. $0.65.

MOSELY, EDWARD LINCOLN. *Trees, Stars, and Birds—A Book of Outdoor Science.* Yonkers-on-Hudson: World Book Co., 1919. Pp. viii+404+xvi. $1.40.

ZIEGLER, S. H., and JAQUETTE, HELEN. *Our Community.* Philadelphia: John C. Winston Co., 1918. Pp. xiii+240.

C. BOOKS PRIMARILY FOR HIGH-SCHOOL TEACHERS AND PUPILS

ADDAMS, JANE. *The World's Food and World Politics.* Chicago: National Conference of Social Work, 1917.

ANDREA, A. LOUISE. *Home Canning, Drying and Preserving.* New York: Doubleday, Page & Co., 1918. Pp. 150.

Basic Quantity Food Tables. Department of Public Charities, City of New York, 1917. For sale by Municipal Reference Library, New York, $1.25.

BRADLEY, ALICE. *Lessons in Food Values and Economical Menus.* Boston: Miss Farmer's School of Cookery, 30 Huntingdon Ave. $0.25.

CHAPIN, HENRY D. *Health First.* New York: Century Co., 1917. Pp. 221. $1.50.

CRANDELL, J. CHESTER, and CRANDELL, MERCY FRYE. *A Manual of Household Accounts.* Boston: Whitcomb & Barrows, 1917. Pp. 24 and blankbook. $2.00.

CRUESS, WILLIAM V. *Home and Farm Food Preservation.* New York: Macmillan, 1918. Pp. xxiv+276. $1.25.

CUNIBERTI, J. L. *Practical Italian Recipes for American Kitchens.* Washington, D.C., 1918. Pp. 32. $0.50.

EAST, ANNA MERRITT. *Kitchenette Cookery.* Boston: Little, Brown & Co., 1918. Pp. 112. $1.00.

GILLETT, LUCY H. *Relation of Food Economics to the Nutritive Value of the Diet.* Chicago: National Conference of Social Work, 1917. Pp. 3.

GRAVES, LULU. *Modern Dietetics.* St. Louis: Modern Hospital Publishing Co., 1917. Pp. 214. $2.00.

GREENBAUM, F. K. *The International Jewish Cook Book.* New York: Bloch Publishing Co., 1918. Pp. 419. $1.50.

HILL, J. M. *Economical War-Time Cook-Book.* New York: Sully, 1918. $0.50.

HUGHES, D. M. *Thrift in the Household.* Boston: Lothrop, Lee & Shepard, 1918. $1.25.

INGRAM, F. *A Community Kitchen in a Neighborhood House.* Chicago: National Conference of Social Work, 1917.

KING, CAROLINE. *Caroline King's Cook Book.* Boston: Little, Brown & Co., 1918. Pp. 275. $1.50.

KINGSLEY, CHARLES. *Westward Ho!* New York: Macmillan, 1919. Pp. xv+483. $0.32.

LUSK, G. *Economy in Diet.* Chicago: National Conference of Social Work, 1917. Pp. 9. $0.12.

OGG, FREDERIC A., and BEARD, CHARLES A. *National Governments and the World War.* New York: Macmillan, 1919. Pp. viii+603. $2.50.

POWELL, LYMAN P., and POWELL, GERTRUDE W. *The Spirit of Democracy.* Chicago: Rand McNally & Co., 1918. Pp. xvi+272. $0.80.

RHOE, M. J. *The Dress You Wear and How to Make It.* New York: Putnam, 1918. $1.50.

SPEARE, MORRIS EDMUND, and NORRIS, WALTER BLAKE, editors. *World War Issues and Ideals.* Boston: Ginn & Co., 1918. Pp. xi+461.

STEWART, ANNA. *Social Problems: Outlines and References.* Boston: Allyn & Bacon, 1917. Pp. vi+233. $0.75.

STEWART, F. E. *Lessons in Cookery.* Book One, *Food Economy.* New York and Chicago: Rand McNally & Co., 1918. $1.25.

D. PUBLICATIONS OF THE UNITED STATES BUREAU OF EDUCATION AND SIMILAR MATERIAL IN PAMPHLET FORM

ARCHIBALD, R. C. *The Training of Teachers of Mathematics.* Bulletin, 1917, No. 27. Paper. Pp. 289.

Cardinal Principles of Secondary Education. A Report of the Commission on the Reorganization of Secondary Education. Bulletin 35. Washington, D.C.: Government Printing Office, 1918. Pp. 32.

Industrial Education in Wilmington, Delaware. Report of a Survey Made under the Direction of the Commissioner of Education. Government Printing Office, Bulletin, 1918, No. 25. Pp. 102.

The Public Schools of Columbia, South Carolina. Report of a Survey. Government Printing Office, Bulletin, 1918, No. 28. Pp. 192.

Rural-Teacher Preparation in State Normal Schools. By ERNEST BURNHAM. Government Printing Office, Bulletin, 1918, No. 27. Pp. 77.